THE ELEMENTARY SCHOOL JOURNAL

VOLUME XXXVIII OCTOBER 1937 NUMBER 2

Educational News and Editorial Comment

THE CHANGING AND THE CHANGELESS CURRICULUM

In a recent issue of *Childhood Education* there appears a stimulating editorial written by Dean B. F. Pittenger, of the School of Education, University of Texas. We quote the editorial in full.

Many persons, including not a few "educators," seem to look upon the school curriculum as a sacred institution, not to be challenged or despoiled. It might, in their way of thinking, have been handed down to Moses on the Mount or dug up out of the rock strata of geologic times. Children, teachers, housing, equipment, and other aspects of the schools may change from age to age but the curriculum—the what-to-teach-in-order-to-educate—should go on unchanged forever.

Some other people, also including "educators," seem to regard change itself, and only change, as sacred. To them, everything old is obsolete and only the new—the newer the better—is entitled to acceptance and respect. There are futurists and fundamentalists in curriculum-making as well as in the musical and graphic arts.

But most educators, like most other people, find a place in the curriculum for both the old and the new. This is the safe-and-sane group which thinks and acts between the extremes of the conservatives and the radicals. To this group nothing about the curriculum is sacred—either the old or the new. The old is conserved and respected as the tried product of experience, but it is also sub-

Boston University
School of Education
Library

jected to constant scrutiny as to its continued life-values. Proposed new material is subjected to the same scrutiny for the same purposes and allowed to replace the old when its superiority is manifest. This group is responsible for keeping the curriculum alive and related to the cultural heritage of man.

It can be said with truth that the educational curriculum is both changeless and changing. Basically, it is changeless; eternally, it seeks to include experiences that will prepare each emerging human being to live happily and effectively in both his inward world of self and his outward world of surrounding circumstance. But these worlds change, and hence the curriculum, in its details of content, must change with them.

These comments emphasize the changing rather than the changeless aspects of the curriculum—changes in response to the demands of everyday living. Everyday living is life itself. The demands of everyday living are the demands of life. In responding to changes therein, the curriculum is responding to changes in human life in all its depths and fullness.

There is nothing strange nor phenomenal about this conception of life and the curriculum. It is as old as the recorded history of man and schools. In ancient Sparta, life was interpreted harshly and a hard and sullen discipline became the means and object of education. In Athens, a rich and many-sided culture found a counterpart in a richly cultural curriculum in school. Rome "legalized" its course of study and its institutions. The medieval church steeped its workers and converts in a philosophy of "other-worldliness" that became an everyday conception more real to its holders than their sense of immediate space and time. The Renaissance and Reformation ushered in new concepts of life and education which revived man's appreciation of the things of the here and now—the one for their own sakes, and the other as of parallel importance with things of the other world; indeed, as part of them.

In our own land, in its comparatively brief history, may be noted the same currency of change in both life and the curriculum. In days when and in places where religion dominated existence, it also dictated the subject matter that was taught in schools. When civic ability and virtue appeared as essential needs for a new democracy, the schools undertook honestly if somewhat awkwardly to educate for citizenship. When later, with expansion over a new continent and exploitation of its natural resources, material success became the dominant life-motive, the course of study reflected the new ideals by emphasizing vocational training and the more superficial elements of culture. Today, in the midst of chaos without, the schools exhibit evidences of a corresponding chaos within.

When one ponders at length the changes that have been thus briefly reviewed, he finds much to suggest that change in the curriculum comes not too slowly but too rapidly. Frequently the changes, while deeply motivated, seem to have been only superficially accomplished. Seldom if ever, it would seem, have the determiners of the curriculum dug down, in either the inward or the outward worlds of life, to the verities that are eternal. Here, perhaps, is an invitation to the making of a basic and lasting change.

In the main, it would seem, human life changes not fundamentally, but rather in those details of existence and adjustment which really constitute a change of clothes. But the man is still the same after he has doffed and donned a change of garments. Our curriculums are, and always have been, clothes-conscious. Their changes to fit new circumstances and conditions are naturally inescapable, but these changes are frequently too all-pervasive because at bottom the curriculum has never been properly founded on the changeless qualities and character of man himself.

When education is at last able to divert its major efforts away from the superficial necessities of adjustment to environment to the basic necessities of character development, there will appear a curriculum which, like the life that it represents, will be changeless in the midst of change.

Dean Pittenger's caution against ephemeral curriculums is altogether timely. In many teachers' colleges and schools of education there is a tendency to multiply courses so that a course may be provided dealing with almost every specific problem with which teachers will be confronted. A similar tendency is noted in high-school curriculums; not infrequently they spread out fanwise to include specific activities of the greatest variety. Curriculum-makers in many quarters seem almost to have lost sight of the principle of generalization. Yet there is a danger of swinging to the other extreme. We are fearful of a curriculum which is based primarily on "verities that are eternal," which, "like the life that it represents, will be changeless in the midst of change." It is true that education has a center of interest quite apart from the current of contemporary social and political change, that in a very special sense it is the guardian of those accumulations of ideas, knowledge, skills, values, and attitudes which constitute what Beard has called "the funded capital of experience." It is equally true, however, that the school serves as a means of securing political and social cohesion and of giving direction to the processes of social change. Quite without regard to time or place, the school has always been used as a means of socializing youth in terms of the purposes and objectives of the control groups in society, in terms of the prevailing value pattern. However much education may be a hostage to the past, it finds its center of interest in the civilization of which it is a part; it always operates within the purposes and ideals of the existing social order. The school, while preserving tradition and contributing to the stability of the existing

pattern of social arrangements, also plays an important role in the processes of social transition. Social forces, playing on the school from without—forces over which educators themselves have little or no control—in large measure determine the school's philosophy, define its social obligations, prescribe the content of its curriculum, and fashion the form of its structural organization. There is a ceaseless flow of consequence between society and school, and there is a corresponding flow of consequence between school and society. In the long run and always, the curriculum is the product of this flow and counterflow. The curriculum serves as an instrument of preserving and conserving the accomplishments of civilization; in fulfilling this purpose, it is more or less removed from the conflict and the turmoil of contemporary social change. It also serves as an instrument of critical social analysis and of social direction; in accomplishing this end, it always comes to grips with the realities of a changing present.

Social Implications of Technological Trends

The swift movement of social change which characterizes American life today is caused very largely by inventions. Invention is the great disturber of the ways of men; it changes first the physical world in which we live, and later it changes the whole pattern of our social arrangements. The impact of technology on our economy has broken most of the old institutional molds and is forcing a reconstruction of institutional forms. In the whole area of social relations, whether of government, economy, education, or ethics, we are faced with the necessity of adaptation and adjustment. The educational institutions of this country will fail signally unless teachers are brought to a deeper appreciation of the social importance of technological change.

In a recently published report entitled *Technological Trends and National Policy*, the National Resources Committee presents a searching analysis of the importance of technology in the national life. The three parts are devoted, respectively, to the following general topics: "Social Aspects of Technology," "Science and Technology," and "Technology in Various Fields." In the Foreword

Harold L. Ickes, Secretary of the Department of the Interior, says of the report:

This document is the first major attempt to show the kinds of new inventions which may affect living and working conditions in America in the next ten to twenty-five years. It indicates some of the problems which the adoption and use of these inventions will inevitably bring in their train. It emphasizes the importance of national efforts to bring about prompt adjustment to these changing situations, with the least possible social suffering and loss, and sketches some of the lines of national policy directed to this end.

The major findings of the committee are of such significance that we quote them in full.

1. The large number of inventions made every year shows no tendency to diminish. On the contrary the trend is toward further increases. No cessation of social changes due to invention is to be expected. It is customary to speak of the present age as one of great change, as though it were a turbulent transition period between two plateaus of calm, but such a conclusion is illusory. Though the rate of change may vary in the future there is no evidence whatever of a changeless peace ahead.

2. Although technological unemployment is one of the most tragic effects of the sudden adoption of many new inventions (which may be likened to an immigration of iron men), inventions create jobs as well as take them away. While some technological changes have resulted in the complete elimination of occupations and even entire industries, the same or other changes have called into being new occupations, services, and industries.

3. No satisfactory measures of the volume of technological unemployment have as yet been developed, but at least part of the price for this constant change in the employment requirements of industry is paid by labor since many of the new machines and techniques result in "occupational obsolescence." The growth and decay of industries and occupations caused by technological progress necessitate continuous and widespread—and not always successful—readjustments and adaptations on the part of workers whose jobs are affected by these changes.

4. The question whether there will be a large amount of unemployment during the next period of business prosperity rests only in part on the introduction of new inventions and more efficient industrial techniques. The other important elements are changes in the composition of the country's production (such as appreciable changes in the proportion which service activities constitute of the total), the growth of population, changes in the demands for goods and services, shift in markets, migration of industry, hiring age policies of industries, and other factors discussed in the body of the report. For instance, even if industrial techniques remained the same, the volume of production would have to be greater in the future than in 1929 in order to absorb the increase in the working

population and keep unemployment to the level of that date. If the productivity of 1935 (the latest year for which figures are available) continues the same in 1937, and the composition of the nation's total product remains unchanged, production would have to be increased 20 per cent over that of 1929 to have as little unemployment as existed then. Failing this there will be more unemployment and if labor efficiency is increased by new inventions or otherwise, then the production of physical goods and services must be more than 120 per cent of what it was in 1929.

5. Aside from jobs, subtracted or added, new inventions affect all the great social institutions; family, church, local community, state, and industry. The committee finds that in all the fields of technology and applied science which were investigated there are many new inventions that will have important influences upon society and hence upon all planning problems. Particularly impressive were new inventions in agriculture, communication, aviation, metallurgy, chemistry, and electrical tools and appliances.

6. A large and increasing part of industrial development and of the correlated technological advances arises out of science and research. Invention is commonly an intermediate step between science and technological application, but this does not make less important the point that the basic ideas upon which these programs are developed come out of scientific discovery or creative activity.

7. Advance of many aspects of industry and the correlated technologies is dependent upon scientific research and discovery. This fact is made clear by the increasing importance of research laboratories in the great industries. The research conducted is not only well organized but it is carried forward with the co-operation of investigators having high rank in the field of science. If the contribution of research were to be reduced, the industries would tend to freeze in a particular pattern.

8. Though the influence of invention may be so great as to be immeasurable, as in the case of gunpowder or the printing press, there is usually opportunity to anticipate its impact upon society *since it never comes instantaneously without signals*. For invention is a process and there are faint beginnings, development, diffusion, and social influences, occurring in sequence, all of which require time. From the early origins of an invention to its social effects the time interval averages about thirty years.

9. While a serious obstacle to considering invention in planning is lack of precise knowledge, this is not irremediable nor the most difficult fact to overcome. Other equally serious obstacles are inertia of peoples, prejudice, lack of unity of purpose, and the difficulties of concerted action.

10. Among the resistances to the adoption of new inventions and hence to the spread of the advantages of technological progress there is specially noted those resistances arising in connection with scrapping equipment in order to instal the new. Better accounting methods and greater appreciation of the rate of inventional development facilitates the spread of improved capital goods.

The rate of capital obsolescence is especially a major problem under monopolistic conditions, which probably favor the adoption of technological improvements less than do conditions of keen competition.

11. The time lag between the first development and the full use of an invention is often a period of grave social and economic maladjustment, as, for example, the delay in the adoption of workmen's compensation and the institution of "safety first" campaigns after the introduction of rapidly moving steel machines. This lag emphasized the necessity of planning in regard to inventions.

This report should be of interest to teachers everywhere. It may be secured from the Superintendent of Documents, Washington, D.C. The price is one dollar.

Trends in School Costs

The following statement is quoted from a recent pamphlet of the United States Office of Education entitled *Per Capita Costs in City Schools, 1935–36.*

Since 1933 there has been a continuous upward trend in expenditures for education in the approximately 300 city public-school systems included in the per capita costs study each year. During the past six years, the average cost reached its lowest level in 1933 when it was $87.65 per pupil in average daily attendance. In 1934 this cost increased to $94.05 or a gain of 7.3 per cent when compared with 1933; in 1935, it reached $96.18, or an increase of 2.3 per cent over 1934; while in 1936, the average cost was $102.73, or an increase of 6.8 per cent over like cost in 1935. In 1933 only 11 cities, or less than 4 per cent of the cities studied, showed increased costs over 1932; in 1934, 55 cities, or more than 20 per cent, reported higher costs than in 1933; in 1935, 195 cities, or more than 70 per cent, showed higher costs than in 1934; while in 1936, 185 cities, or more than 86 per cent expended more per pupil than in 1935. Although the increase in pupil cost from 1933 to 1936 was 17.2 per cent, yet in 1936 it was 5.6 per cent less than like cost in 1930, and 9.1 per cent less than like cost in 1932.

Here and There among the Schools

An educational clinic in Pittsburgh.—From Ben G. Graham, superintendent of schools of Pittsburgh, we have received the following statement with regard to the educational clinic established in Pittsburgh last year.

An educational clinic was organized during the year to serve the needs of children who are failing to adjust in school. The clinic has met every Friday for examinations of children by persons trained in various phases and aspects of

child guidance. A multiple approach was made to each child's problem, through a study of his physical, intellectual, emotional, social, and educational needs.

Since inability to read is one of the most frequent types of school failure, and one which has a particularly vital influence on later school progress and behavior, the clinic addressed its efforts during the first year primarily to the study of reading disabilities. In the future other types of difficulties will also be considered in the clinic.

The general aims of the clinic are: (1) to provide a diagnostic center to which children having various types of educational problems may be referred; (2) to combine physical, psychological, social, and educational data for a better understanding of the whole child as he reacts to his environment; (3) to utilize modern principles of mental hygiene in an approach to educational problems; (4) to acquaint principals and teachers with diagnostic and remedial procedures through clinic staff meetings; (5) to make helpful suggestions for the solution, so far as possible, of each child's problem in the light of the clinic findings; (6) to evaluate by follow-up studies the methods used and the results of treatment.

A more detailed account of procedures employed in the clinic will appear in the annual report of the superintendent for 1936–37.

A method of keeping the public informed about the ideals and operation of its schools.—Superintendent H. H. Kirk, of Fargo, North Dakota, has adopted the practice of sending to parents, with the report cards issued each six weeks, a small four-page pamphlet. The first page contains a short but well-worded message from the superintendent on some aspect of the schools' objectives or on some specific phase of the schools' work. The two inner pages usually contain a brief factual statement about such matters as school costs, the kinds of schools in the city, or school enrolment. The last page contains the names of the members of the Board of Education and an apt quotation from some writer of note. The booklet is printed by the senior high school printing class.

Administration and supervision based on carefully planned programs of committee study.—M. E. Coleman, assistant superintendent of schools of Atlanta, Georgia, has supplied us with an account of the work being done there by committees of elementary-school principals in planning educational policies and procedures. The purpose of the plan is to develop "a type of administration and supervision in the elementary schools based on a carefully planned program of committee study during the year." The committees are composed of elementary-school principals. No teachers have been placed on any

committee, but it is intended that each principal will confer with the teachers in her school and will in fact make them, or as many of them as she deems advisable, associate members with her on the committee. During 1936–37 there were sixteen committees at work. Some of the problems under consideration were as follows: the principal as administrator, the principal as supervisor, the curriculum, pupil progress, textbooks, selection and training of teachers, principals' meetings, school and community relations, and economy of school time. At some time during the year each committee submits a formal report.

The following communication, addressed by Mr. Coleman to the Committee on the Principal as Administrator, is typical of the communications addressed to the various committees and illustrates the fundamental approach that is being made to the problems of administration and supervision.

It is becoming more and more apparent that the principal must assume a large share in the administration of our schools and to that extent should be an integral part of the superintendent's staff. The principal is the connecting link between the superintendent and the teachers; the teachers and the parents; the superintendent and the parents; the schools and the community. This in addition to the extent to which the principal must serve as agent of the superintendent in carrying out the policies, rules, and regulations of the board of education.

The problem of this committee is one of major importance. We hope that the committee will be able to do three things:

First, help strengthen the position of the principal in the minds of the principals themselves, as well as others, as to the place of the principal in these major factors of school life.

Second, study these problems with an idea of making suggestions as to how these functions may be performed. How, for example, can a principal best relate her teachers to her parents and the community as well as to the central office?

Third, what practical adjustments must be made in order to enable the principal, first, to train herself the better to do this work; second, that she may have the time in which to do it?

Improving the administrative organization in New Rochelle, New York.—Under the editorial caption, "A Managing Superintendent," a recent issue of the New Rochelle *Standard-Star* describes the program of administrative reorganization which the new superintendent, Herold C. Hunt, is attempting to carry into effect. The basic

principles underlying the proposed plan of organization are described as follows:

A board of education should:

1. Systematize its business, give to its executive staff full responsibility for executive detail, and devote itself only to oversight and direction of all that is done.

2. Make the superintendent the executive officer of the board, give him full power and responsibility, and hold him strictly accountable for the successful conduct of all departments of the system.

3. Define, with the superintendent's aid, the functions of every person attached to the district.

4. Recognize that its duty is to see that the schools are properly managed and not manage them itself.

In accordance with these general principles, Superintendent Hunt is recommending that standing committees be abolished and that the status of a number of "line" officers be redefined. The *Standard-Star* comments on the proposal as follows:

It is gratifying that the board has shown a proper response to Mr. Hunt's straightforward manner of grasping a new situation and determining that he is going to do the job he was hired to do, credit or blame fall as it may.

The board has under consideration now the revision of its bylaws, and, in what might be called a test vote Tuesday night, the seven members attending the meeting were unanimous in their opinion that the special committee . . . . should continue its study of bylaw revision on the basis of eliminating the standing committees. . . . .

Abolition of the standing committees is a step that clears the way for Mr. Hunt to operate as he desires to conduct the school system.

The Board of Education is to be congratulated on its attitude in giving the new superintendent full authority and placing in him full responsibility. It has exhibited keen wisdom in its decision on this question—just as it displayed excellent judgment in its choice of a man to fill the superintendent's position, a conclusion that the events of one month have already proved.

Guidance in the development of units of work.—The first number of the University Elementary School Curriculum Reports, published by the Bureau of Educational Reference and Research of the University of Michigan, is entitled *Station TGR: A Radio Unit Developed in the Third Grade.* The pamphlet contains a clear, detailed, and well-written account of the development of the unit. Teachers interested in developing activity units will find these curriculum reports particularly valuable. They are prepared under the auspices of the Cur-

riculum Committee of the University Elementary School, with Professor Willard C. Olson, director of research in child development, serving as consultant. In the Foreword the committee comments as follows on the type of unit that seems most desirable:

It is the feeling of staff members that the most satisfactory unit of work is one that grows out of the experience of children, develops, reaches a satisfying conclusion, and is not necessarily repeated again by other children. It is recognized, of course, that this ideal is only partially realized in practice. It is the hope of the committee that the increasing availability of accounts of the type here presented will encourage teachers to test the possibilities of similar attempts in their own programs.

A social-science course based on our heritage from modern nations.—In Grades IV and V of the schools of Ironwood, Michigan, a course in the contributions of modern nations to civilization, and especially to American civilization, has been substituted for the traditional type of course in American history. We are indebted to Inez B. Petersen, supervisor of the elementary schools, for the following account of the content and purposes of the course.

Ironwood has eliminated, in the social-science course for Grades IV and V, most of the subject matter now found in many courses of study and has substituted other material of social, cultural, recreatory, and historical value which might be classified under one head as "Our Heritage from Modern Nations." This study includes education, brief history, literary productions, institutions, art, music, geography, and characteristics of people and their modes of living, such as food, shelter, clothing, play, and recreation. For instance, the relations of climatic conditions, natural resources, and location to life in various countries are observed. Hence, we do not live as the Laplanders because of certain geographical factors over which we have little or no control. If, however, we were suddenly transported to a colder or a warmer climate, we too would change many of our habits and customs. Throughout this phase of the curriculum a comparison with these nations and our own nation is made. Similarities and contrasts are emphasized. Contributions that have helped in the development of culture, science, government, art, or some other phase of civilization are observed as far as possible. Thus a knowledge of these nations will not only help us to understand foreign peoples, but it will also give us a better knowledge of our country. It should also broaden pupils' horizons.

American history is not discarded, but much material has been eliminated. Chief concern is given to Colonial life, southern plantation life, present living, education, inventions, discoveries, music, art, personalities, and national progress. The chief purpose throughout is to develop a tolerant and an enlightened citizenry through a genuine understanding and an appreciation of the worth-

while things which have been our inheritance and which, it is hoped, will make the boys and girls honest, open-minded, loyal, sincere, unbiased, happy, and intelligent participants in the affairs of their own great nation.

A Program of Research on the Effects of the Depression on Education

The Social Science Research Council is sponsoring the publication of a series of thirteen memoranda which will serve as guides to the study of the social aspects of the depression. These monographs will deal with the effects of the depression on crime, education, the family, internal migration, minority peoples, recreation, religion, rural life, consumption, health, reading habits, relief, and social work. Although the essential purpose of these memoranda is to outline a research program, they will, nevertheless, contain much information on the social consequences of the depression.

The *Research Memorandum on Education in the Depression* (Bulletin 28 of the Social Science Research Council), prepared by the Educational Policies Commission, with the assistance of Professor Jesse B. Sears, of Stanford University, has recently been published. The following quotation indicates the general purpose and scope of the volume.

> The effects of the depression most of concern are reflected both in the changes produced in education and in what the people or the schools did about it. Through proposed researches, the purpose here will be to try to bring to light any serious problems that have been left to education by this disturbance. Some of these are studies that take stock of changes, good or bad; others of evaluating what was done, or the consequences of neglect; and last, but certainly not least, of how to attack problems yet unsolved.
>
> In such a large field for a review of this kind, many possibilities were open. The one chosen applies the logic most in use in the study of education, in writings within the field, and in the practical organization of educational service. The general topics for the eight chapters embodying the problems proposed for research are: historical and comparative problems, theory and philosophy of education, student personnel, the curriculum or program of instruction, staff personnel, organization and administration, finance and business management, scientific and professional activities.
>
> The problems presented were systematically gathered over a period of some weeks, during which time literature in this field was reviewed, conferences were held with authors of other monographs of this series in order to delimit the field, and correspondence was held with a few recognized experts interested in this problem.

From the standpoint of research, the literature comprised in the bibliography of some 1,600 titles, soon to be published by the Educational Policies Commission, was a bit disappointing. It does embody evidence of substantial activity within the profession concerning depression effects on the schools. It reflects what was done to the schools and to education in a broader sense. It not only reveals what the people and the schools were doing about their difficulties, but also much speculation as to cause and cure. Of careful research, however, it shows a very small amount. Consequently many problems have been presented in this monograph primarily as questions and have not been developed in the more extended form. Enough of them are stated as formal hypotheses so the readers will not be misled by the brief and informal setting in which some of the others appear.

In presenting the problems two groups of readers have been kept in mind, viz., advanced students and professional research workers, in the social sciences generally and in education in particular. Because education is an applied social science, there is little conflict of interest and certainly very much in common between these two groups of research workers, though at present each of them is too little acquainted with what the other is doing.

No attempt has been made to make this a treatise on education, and certainly none to make it a treatise on the social sciences. Also, it is not a systematic review of the effects of the depression on education. It proposes plans for researches that are required as a foundation for a treatise on this latter subject. In preparing these plans, and to avoid making a dull catalogue of questions, effort has been made to give the questions some educational setting. All questions are not of equal importance; some, quite easy to ask, are impossible to answer satisfactorily. Views on education are offered here only as a basis for making clear some problem or group of problems.

Nor is this a treatise on research method. It does, however, provide some assistance in making an approach to the problems. To this end, effort has been made, not only to give the issues adequate interpretation from the educational and social viewpoint, but to present sample hypotheses set up for research attack, with some directions as to methods and sources. It has not been the purpose to do all the things required but only enough to suggest a mode of attack. These problems offer a wide sampling of the field, of the sources to be drawn upon, and of research techniques. In all cases, however, they were selected because they were regarded as important problems.

A companion pamphlet, issued by the Educational Policies Commission, is entitled *A Bibliography on Education in the Depression.* The major divisions in the bibliography correspond to the chapter headings in the monograph. The bibliography contains some 1,600 titles.

Publications of Interest to Teachers of Young Children

The Association for Childhood Education has recently published a number of bulletins which should prove particularly helpful to teachers in the lower grades. Each of the publications was compiled or written by well-known teachers in the field of early childhood education. The titles are as follows: *Foundations in Arithmetic, The Modern Kindergarten, Equipment and Supplies, Bibliography of Books for Young Children,* and *The Kindergarten Centennial, 1837–1937.*

We quote from a release of the association:

> This new educational bulletin [*Foundations in Arithmetic*] of the Association for Childhood Education explains the real place of arithmetic in the primary school and analyzes today's trends in its teaching; suggests the number concepts and meanings we may expect young children to have and how they can be developed more effectively; explains of what beginning number should consist and the foundations necessary in problem-solving.
>
> In addition, there are illustrative lessons from first-, second-, and third-grade classes in arithmetic, with outlines of the backgrounds, methods of development, and results to be expected from their use.

This bulletin was compiled by Ada Polkinghorne, University Elementary School, University of Chicago, and it was edited by Clifford Woody, University of Michigan; F. B. Knight, University of Iowa; and Edwina Deans, Public Schools, Greensboro, North Carolina. Among the contributors are Harry O. Gillet, University of Chicago; R. L. Morton, University of Ohio; W. A. Brownell, Duke University; E. L. McDonnel, and Helen Laurie, Seattle Public Schools; and six teachers in the University Elementary School, University of Chicago. We cite the authors of this bulletin as an illustration of the high quality of authorship of the entire series.

The following statement is quoted from the release describing the bulletin dealing with *Equipment and Supplies.*

> How to select wisely the equipment and supplies to be used in schools for young children often is a perplexing problem. Definite, dependable information frequently is lacking as to the quality of the material and its actual value in the schoolroom.
>
> As a helpful solution of this problem, during the past two years test centers were established in various sections of the country by a committee of the

Association for Childhood Education, and manufacturers were invited to send materials to these centers for examination and testing. Each article received was placed in actual classroom use, and the results carefully recorded.

The new issue of *Equipment and Supplies* is the outcome of this painstaking work. It contains complete, detailed lists of suggested equipment and supplies for nursery schools, kindergartens, and primary grades of given numbers of children; alphabetical lists of various items, grouped under such headings as "Apparatus," "Art Supplies," "Building Blocks," and so on, describing the items and giving names of manufacturers or distributors, and the age levels for which suitable. There is also a short bibliography of reference material and an alphabetical list of manufacturers with their addresses.

Who's Who in This Issue

Charles A. Smith, district superintendent of schools, Rosemead Elementary District, Rosemead, California. Joseph H. Collins, principal of the Northeast Junior High School, Kansas City, Kansas. Harl R. Douglass, professor of secondary education at the University of Minnesota. Grace C. Schaeffer, supervisor of Grade IV at the Eastern State Normal School, Madison, South Dakota. Albert Grant, statistician at the Psychological Laboratory of the Public Schools, Cincinnati, Ohio. J. C. Seegers, professor of elementary education at Temple University. Alice Price, graduate student at Temple University. William S. Gray, professor of education at the University of Chicago. R. L. Lyman, professor of the teaching of English at the University of Chicago. Frederick S. Breed, associate professor of education at the University of Chicago. Frank N. Freeman, professor of educational psychology at the University of Chicago. R. M. Tryon, professor of the teaching of history at the University of Chicago. Edith P. Parker, assistant professor of the teaching of geography at the University of Chicago.

THE EXPERIENCE METHOD IN BEGINNING READING

CHARLES A. SMITH
Rosemead Elementary District, Rosemead, California

QUESTIONS RAISED BY THE CURRENT-EXPERIENCE METHOD

In the light of current progressive practices using nonreading programs in Grade I, those who would like to withhold judgment must inquire what pre-reading experience, what vocabulary training a child learning to read should have. Stone[1] points out that "there is abundant evidence in research studies today to indicate that the current methods of teaching beginning reading are producing nonreaders and seriously retarded readers in such numbers as to cause real concern." Current methods of teaching reading, of course, are not unmixed with traditional methods. "Incidental" and "natural" methods of teaching reading are thought to contribute to "memory reading" as an inevitable result, according to Stone's appraisal of the current-experience method. Stone maintains that under this method systematic repetition of a minimum basic vocabulary in meaningful reading will be insufficient to result in word-learning and that some teachers attempt to offset this weakness by having children match words and phrases in the unit chart, "following the technique of the nursery-rhyme and folk-tale method." He then goes on to point out that the current-experience method is too involved for any except those six-year-old children "who readily learn to read under any method or with no method"—those who are ready for reading.

In an impressive investigation Lee[2] found that the activity program resulted in lower grade placement for all types of pupils on the Primer Test and the First Reader Test of the Lee-Clark Reading

[1] Clarence R. Stone, "The Current-Experience Method in Beginning Reading," *Elementary School Journal*, XXXVI (October, 1935), 105–9.

[2] J. Murray Lee, "Reading Achievement in First-Grade Activity Programs," *Elementary School Journal*, XXXIII (February, 1933), 447–51.

Tests. As Lee points out, one weakness of his study is that the teachers rated *themselves* with respect to the amount of "activity" which they employed in their teaching. It is possible that teachers who were not "activity-minded" would tend to rate themselves as doing a great deal of activity teaching if they did any at all and that teachers who believed heartily in activity teaching would rate themselves as doing a little when they might be doing more than the other group. In the degree to which this tendency is true, Lee's findings can be interpreted in the reverse from his conclusions. If all the conditions are accepted, the evidence given by Lee justifies his conclusions. However, if total unreliability of the teachers' self-ratings be assumed, the activity protagonist might point to the significance of the gain which was made under the activity program. However, Lee's conclusions support Stone's contention that the experience method is producing nonreaders in alarming numbers. If the method produces median grade placements which are lower by from one to seven months than the placements under less activity, it would seem that nonreaders would be more numerous under the current-experience method.

The experience method thus raises two questions: (1) When shall the child be started in actual reading? (2) From the standpoint of drill itself and of the application of the laws of learning, what merit is there in the experience method?

As long as the protagonists of the experience method assume that the necessary experiences are equally possible to all children of six years of age, they will suffer the same reverses in securing reading ability that the earlier drill methods suffered—and for the same reason. It is no more possible for the immature child to get "meaningful" concepts in relation to reading than it is for him to "learn" words. If the child is too immature for "meaningful experience" in reading, mere activity will not produce results.

It is not the purpose of this article to discuss reading readiness except as readiness is a part of the general problem of the experience method. In 1898 Dewey gave a good summarization of the basic philosophy.[1] A more complete discussion of the scientific factors of

[1] John Dewey, "The Primary-Education Fetich," *Forum*, XXV (May, 1898), 315–28.

the problem is given by the present writer and Miss Jensen in an article bearing directly on this problem.[1] It would seem that a delay until the child has reached a mental age of six and one-half years would be justifiable. Such a delay would give some assurance that other factors involved would have reached a maturity level commensurate with the difficulties encountered. It also seems safe to say that, if the experience method is applied without due regard to maturation, that method too will meet with a high degree of failure. While the amoeba can be stimulated by the prick of a pin, the reaction patterns do not take the form of walking away or of emotional antagonism. Thus, with the child in reading: methodical drill may produce measurable results, but it is doubtful whether, over a long period of time, it will produce the inquisitive and the insatiable reader with nervous integrity. The hope of the protagonists of the experience method is that this program will produce such readers.

COMPARISON OF READING PROGRAMS USING VARYING AMOUNTS OF ACTIVITY

State departments and teacher-training schools have already made their impressions on many teachers. However, there is still a dearth of statistical evidence to show whether postponement of reading increases or decreases the number of nonreaders or whether the activity program provides an enriching experience in vocabulary which is of more ultimate value than is the drill method in reading. In the study which is reported in this article, an attempt is made to add to the growing amount of evidence which is necessary to the final solution of the problem. The weakness of this study is similar to that reported by Lee. However, in this case the judgments on the degree of activity employed by the teachers were made by the supervisors. Whether this fact is a greater or lesser defect will be adjudged by the reader on the basis of his experience in school and his attitude toward the problem.

At the beginning of the third month of the school term of 1935–36, when the various classroom activities were well under way, stenographic records were made of all that took place during a single day

[1] Charles A. Smith and Myrtle R. Jensen, "Educational, Psychological, and Physiological Factors in Reading Readiness," *Elementary School Journal*, XXXVI (April and May, 1936), 583–94, 682–91.

in six classrooms in Ventura, California. The stenographers made complete records of every word which was used by pupils and teachers in the class situation. Every word used on charts, mimeographed sheets, blackboards, or in books to which the children were exposed was recorded for all first-grade rooms. One record was made of written words and another of the spoken words which were used in explanation or by way of comment. All the words having direct relation to the reading work were classified against Thorndike's word list.[1] It is recognized that a frequency evaluation of words is not the best method for selecting the words to be used by first-grade children, but it is also recognized that the Thorndike list has been a potent factor in the building of the vocabularies of the textbooks in reading now on the market and in the building of what teachers recognize as a child's vocabulary. This list therefore makes a good measuring stick against which the experience method may be checked in comparison with the drill method. In this checking, the word list on which the drill methods are based was used, and the procedure was therefore not unfair to the older methods.

The results of the November count are shown in Table 1. From this table it is seen that there was a tendency for the activity teacher to use more reading-exercise or reading-drill words in her activities than the formal teacher used in her drill. The activity teacher also tended to use more of the words in the first five hundred of the Thorndike list. This finding has a direct application to Stone's suggestion that the experience method provides insufficient systematic repetition of a minimum basic vocabulary. If Teacher 1, who used no books at all and did much work with experiential activities based on the children's interests, is compared with Teacher 6, who was most formal in the sense of doing much drill work, it is evident that the former gave more exposure to words in every classification. In this table are represented those words which were used in written work. These words were checked against those used orally, and every written word was also used orally. Only those words which were used in the teaching relation are represented; that is, words

[1] Edward L. Thorndike, *A Teacher's Word Book of the Twenty Thousand Words Found Most Frequently and Widely in General Reading for Children and Young People.* New York: Teachers College, Columbia University, 1931.

used to give directions for class movement or to assist in individual child problems were not listed. Teacher 5 gave the children almost as many word exposures in the minimum essential list as did either Teacher 1 or 2, the differences being insignificant. A checkup count on the three teachers showed the same relation. Teacher 5 was an experienced teacher; Teacher 1 was practically inexperienced. This fact may account for the latter's use of a larger number of words

TABLE 1

DISTRIBUTION, ACCORDING TO PLACEMENT IN THORNDIKE LIST, OF WRITTEN WORDS USED IN ONE DAY'S WORK IN NOVEMBER, 1935, IN THE READING PROGRAM IN CLASSROOMS OF SIX FIRST-GRADE TEACHERS RATED ON AMOUNT OF ACTIVITY USED

TEACHER	FREQUENCY OF USE OF WORDS ACCORDING TO PLACEMENT IN THORNDIKE'S WORD LIST									
	First Hundred	Second Hundred	Third Hundred	Fourth Hundred	Fifth Hundred	Second Half of First Thousand	First Half of Second Thousand	Second Half of Second Thousand	First Half of Third Thousand	Total
1. (No basic books, much activity)	290	51	29	27	17	43	38	38	13	546
2. (No basic books, work based on children's interests)	234	82	55	26	30	54	22	11	6	520
3. (No basic books, work based on children's interests)	238	37	16	29	21	25	18	7	7	398
4. (Some basic books, work based on children's interests)	179	22	16	19	15	23	16	14	1	305
5. (Work based largely on book materials)	276	66	70	21	17	36	16	5	4	511
6. (Work based solely on book materials)	160	39	19	7	4	16	.....	4	.....	249

from the higher sections of the Thorndike list. The checkup count disclosed the same tendency. However, since all except Teacher 1 were experienced teachers, the conclusions may be justified that it is the method which creates the demand for more word usage in meaningful situations and that, if Teacher 1 had been forced to follow the drill method, she would have scored lower in the number of word presentations to the children.

However, when a whole school system is compared or when two methods or philosophies are compared, what a given teacher might have done with another method is not pertinent. If the drill method succeeds, on the whole, in teaching more words in the beginning

years of training, it is superior in one respect. If the child learns the words permanently after about twenty-five exposures and if the experience method succeeds in giving these exposures quicker than the traditional method, it is fair to assume that the experience method is superior on the basis of the number of words learned. Table 2 shows that the activity teachers succeeded not only in pre-

TABLE 2

NUMBER OF PRESENTATIONS IN ONE DAY'S WORK GIVEN WORDS FROM FIRST HUNDRED OF THORNDIKE LIST BY SIX FIRST-GRADE TEACHERS RATED ON AMOUNT OF ACTIVITY USED

TEACHER	NUMBER OF DIFFERENT WORDS PRESENTED	NUMBER OF WORDS PRESENTED						TOTAL NUMBER OF REPETITIONS
		30–39 Times	20–29 Times	10–19 Times	5–9 Times	2–4 Times	Once	
1. (No basic books, much activity)	34	.....	1	5	14	12	2	32
2. (No basic books, work based on children's interests)	40	.....	3	3	12	18	4	36
3. (No basic books, work based on children's interests)	32	.....	4	2	9	10	7	25
4. (Some basic books, work based on children's interests)	42	.....	1	4	7	11	19	23
5. (Work based largely on book materials)	43	1	3	4	7	14	14	29
6. (Work based solely on book materials)	41	.....	.....	3	10	15	13	28

senting as many words but also in repeating as many of the words presented as did the teacher using the drill method. Since the words which are repeated in the activity method are repeated not as drill but in vital relation to the reading materials and to the child's needs, it may be assumed that the repetitions are more intense and therefore more effective. The activity protagonists would claim that, since the repetitions occurred with the complete co-operation of the child, there would be few, if any, occasions to stimulate nervous disintegration in the child and that this situation would tend toward more effective learning. Whether this assumption is correct

may be determined only after many more recordings and follow-up tests.

Table 3 shows the results of a similar stenographic record made in June, 1936. It will be seen that there was little difference among the teachers with respect to the number of words presented. By the time children have gained some facility in the recognition of words and are allowed to use books, the variations shown in Table 3 could arise

TABLE 3

DISTRIBUTION, ACCORDING TO PLACEMENT IN THORNDIKE LIST, OF WRITTEN WORDS USED IN ONE DAY'S WORK IN JUNE, 1936, IN THE READING PROGRAM IN CLASSROOMS OF SIX FIRST-GRADE TEACHERS RATED ON AMOUNT OF ACTIVITY USED

TEACHER	FREQUENCY OF USE OF WORDS ACCORDING TO PLACEMENT IN THORNDIKE'S WORD LIST									
	First Hundred	Second Hundred	Third Hundred	Fourth Hundred	Fifth Hundred	Second Half of First Thousand	First Half of Second Thousand	Second Half of Second Thousand	First Half of Third Thousand	Total
1. (No basic books, much activity)	332	93	60	71	72	44	63	39	22	796
2. (No basic books, work based on children's interests)	318	101	52	27	35	66	41	29	31	700
3. (No basic books, work based on children's interests)	301	90	72	53	41	60	49	33	26	725
4. (Some basic books, work based on children's interests)	246	67	48	29	27	39	42	34	21	553
5. (Work based largely on book materials)	322	105	91	52	40	46	37	41	27	761
6. (Work based solely on book materials)	327	73	41	19	24	34	21	28	32	599

from differences in the books that they happen to be using at the time. However, some of the difference is due to the fact that the experience method uses experiential activities in addition to the book exercises. The evident influence of books reflected here elicits the observation that the concern over the efficacy of a given method used by teachers is needless. After all, the differences in teachers' methods are ironed out to a degree by the common textbooks which are used, and in vocabulary usage the first-grade books do not permit a great deal of variation. Furthermore, a method is controlled somewhat by the attitude of a community. An activity-minded teacher, in order to protect her position, may be forced to a formal

program by the community attitude. Such is the price of democracy. In 1898 Dewey advocated the experience method in the teaching of reading, writing, and arithmetic, but in 1937 a community in California resists scientific findings with respect to these same subjects. Since the resistance includes writing and arithmetic, as well as other fundamental subjects, there is little need to worry whether the experience method in reading will produce enough drill. The community attitude will always be adequate guaranty that the schools will not move faster toward this program than is justified by the development of reliable techniques and measurements and by the production of evidence to warrant permanent change. However, if there is any difference in the amount of word drill given by the two methods, it seems to favor the experience method. Advocates of the drill method would counter with the statement that there is little value in mere repetition. Unless the repetitions are conscious repetitions, there is little chance that learning will take place.

In an attempt to discover any differences which might have occurred during the year with respect to the total reading achievements, a careful check was made on a number of items. Table 4 shows the results of the check. The evidence is far from conclusive. It would be conceded that the teachers ranked as activity or experience-method teachers, except Teacher 2, stand at the top with respect to the number of books read. Since much reading was done in these classes which was not done from books, it would seem that these children actually read even more. However, there were other contributing factors. The classes reporting the reading of fewer books included children coming from the sections of the city largely made up of working people, while those reporting the reading of greater numbers came from the part of the city in which are located the homes of professional and business men. This contrast is true without exception. The class of Teacher 2 was made up chiefly of pupils from the Spanish and Mexican section of the city, and many of these children could not speak English when they entered school. In view of this fact the record of this class is especially surprising. In the matter of the number of words learned, the test disclosed that one pupil under Teacher 5 learned 639 words. The average for this class was not significantly different from the other averages. With

the exception of the class of Teacher 2, in which special difficulties in learning the language were encountered, the number of words learned by the various classes was relatively uniform.

Factors which vitiate the value of the results of this study and which are not subject to control in so small a study are problems of home background, accurate pairing of intelligence quotients, and

TABLE 4

NUMBER OF BOOKS READ AND NUMBER OF WORDS LEARNED BY FIRST-GRADE CHILDREN TAUGHT BY SIX TEACHERS RATED ACCORDING TO AMOUNT OF ACTIVITY USED

TEACHER	NUMBER OF BOOKS READ			NUMBER OF WORDS LEARNED		
	Class Range	Class Average	Average with Non-readers Eliminated	Class Range	Class Average	Average with Non-readers Eliminated
1. (No basic books, much activity)	5–24	12.8	11.0	52–501	301	412
2. (No basic books, work based on children's interests)	3–16	7.0	9.0	23–319	175	.....
3. (No basic books, work based on children's interests)	6–22	10.5	10.5	50–378	261	382
4. (Some basic books, work based on children's interests)	3–17	12.5	10.5	49–500	359	419
5. (Work based largely on book materials)	3–10	7.3	7.3	53–639	283	.....
6. (Work based solely on book materials)	2–9	6.0	8.0	20–447	270	298

size of class. However, except with respect to the conditions mentioned, there are no significant differences in the various classes. If the results were to be carried through to a satisfactory conclusion, it would be necessary to control these factors. It would likewise be desirable to follow the pupils on through the higher grades—a course which is also impossible because the turnover in the enrolment is so great that results would be valueless. For example, in one class leaving Grade VI in 1936 there were only six of the original members—one in six.

Dewey said in the article referred to above:

> The act of writing—especially in the barbarous fashion, long current in the school, of compelling the child to write on ruled lines in a small hand and with the utmost attainable degree of accuracy—involves a nicety and complexity of adjustments of muscular activity which can be definitely appreciated only by the specialist. As the principal of a Chicago school has wittily remarked in this connection, "the pen is literally mightier than the sword." Forcing children at a premature age to devote their entire attention to these refined and cramped adjustments has left behind it a sad record of injured nervous systems and of muscular disorders and distortions. While there are undoubted exceptions, present physiological knowledge points to the age of about eight years as early enough for anything more than an incidental attention to visual and written language form.[1]

While the evidence is not so certain in the field of reading, there is little doubt that the drills required by the older teaching methods often result in the conditions to which Dewey refers; and, from the angle of personality development, it is thought that these drills contribute to a great deal of unhappiness in school. While the effect on personality is a matter of subjective judgment, opinions secured in this study were in agreement. Parents were asked to respond to a series of questions designed to check the relative happiness of the children involved. The number of affirmative answers to the question, "Is your child happy in school?" were 25 per cent greater for the teachers using activity methods than for those using formal methods. The answers to other questions verified this figure. However, the whole problem is so subjective as to render valueless a detailed report of the questionnaire.

It is useless to argue that children do not enjoy learning. Assignments which are reasonable and definite are always eagerly attacked by children. Drills, on which results can be measured, are popular with pupils, but to assume that the diet should be constant may be questionable. If the same drill can be achieved through meaningful situations which create a happier learning atmosphere, it seems that the plan is worth trying. On the other hand, if the necessary drill can be secured in ten minutes via the traditional route, it seems a waste of time to spend fifteen minutes in drill through "meaningful" experience. It is probable that time is wasted in the use of the experience method, but it has never been proved that there is no waste of time

[1] John Dewey, *op. cit.*, p. 320.

in drill. It would seem fair to conclude from the facts reported in this article that the child can be taught meaningful facts about his environment while he is learning the linguistic tools for reading. It may be assumed that the knowledge of meaningful facts will lead to a further desire to read, and further reading will give increased drill. The number of meaningful facts which may be taught is limited only by time and by the imagination and the initiative of the teacher.

SUMMARY

1. Some leading students of the problem believe that the current-experience method of teaching reading fails to give systematic repetition of a minimum basic vocabulary in meaningful reading, which should result in word-learning.

2. Lee reports that the activity method results in lower grade placement for all types of pupils in the primer and in first and low-second grades.

3. Evidence gathered from the first grades of a small city system indicates that, insofar as testable drill materials are concerned, the experience method actually provides as much repetition as does the drill method. Stenographic reports of reading situations show that, for the minimum basic word list, the first-grade child taught by the experience method is even more likely to receive drill or repetition of basic words than is the child taught by the traditional method. The former not only encounters at least as many words, but he is likely to be given more repetitions of the words.

4. Subjective evidence relative to child adjustment in school favors the experience method even where the evidence is given by parents who object to "activity."

5. The factors involved in the problem are so numerous as to be uncontrollable in a small situation. Continued careful check on the basis of tests is desirable in order that the value inherent in the good things of the traditional school may not be lost. Tests are necessary to determine whether the objectives attributed to the experience method, such as good personality adjustment, are actually achieved.

6. The acquisition of meaningful facts justifies the experience method on the basis of factors other than drill. Nevertheless, word drill may be, and seemingly is, given as well or better under the current-experience method.

THE SOCIO-ECONOMIC STATUS OF THE HOME AS A FACTOR IN SUCCESS IN THE JUNIOR HIGH SCHOOL

JOSEPH H. COLLINS
Northeast Junior High School, Kansas City, Kansas
HARL R. DOUGLASS
University of Minnesota

The home plays an important part in determining the child's success, failure, and persistence in school. Studies consistently show high correlation between the progress of children in school and the educational, economic, and social advantages in the home.

As part of an investigation involving 146 pupils of superior ability in Northeast Junior High School in Kansas City, Kansas, a study was made in 1935 of the socio-economic status of the home of each child concerned. Each of the 146 superior pupils had an intelligence quotient of 110 or higher. Of these bright pupils, twenty-seven were failing in at least one major subject or were receiving school marks that averaged no higher than the lowest passing mark; another twenty-seven were enjoying much success and were receiving school marks averaging "2" (superior) or better; and ninety-two pupils were receiving marks averaging "3" (average). These three groups were designated the "failure group," the "success group," and the "average group," respectively. The mean intelligence quotient for each of these groups was approximately equal. The data of Table 1 furnish a distribution of the 146 pupils by group, grade, and sex.

Socio-economic status of three groups.—The chief instrument used in studying the conditions of the homes was the Sims Score Card for Socio-economic Status—a simple, convenient, and fairly objective device by which to ascertain and record the general cultural, social, and economic home background. In this device an underscoring of "yes" or "no" answers to twenty-three short questions regarding home and family gives an index to both the cultural and the economic status of the home. The results from the use of this easily

administered score card permit a numerical rating with which statistical comparison of homes can be made.

Other indexes of the home and family standing of these three groups of pupils given consideration were: (1) occupations of the

TABLE 1

DISTRIBUTION OF THREE GROUPS OF SUPERIOR JUNIOR HIGH SCHOOL PUPILS ACCORDING TO GRADE AND SEX

GRADE	BOYS		GIRLS		BOTH	
	Number	Per Cent	Number	Per Cent	Number	Per Cent
Success group:						
Grade VII	1	0.7	8	5.5	9	6.2
Grade VIII	1	0.7	6	4.1	7	4.8
Grade IX	2	1.4	9	6.2	11	7.5
Total	4	2.7	23	15.8	27	18.5
Average group:						
Grade VII	13	8.9	25	17.1	38	26.0
Grade VIII	9	6.2	16	11.0	25	17.1
Grade IX	12	8.2	17	11.6	29	19.9
Total	34	23.3	58	39.7	92	63.0
Failure group:						
Grade VII	5	3.4	2	1.4	7	4.8
Grade VIII	3	2.1	3	2.1	6	4.1
Grade IX	10	6.9	4	2.7	14	9.6
Total	18	12.3	9	6.2	27	18.5
All groups:						
Grade VII	19	13.0	35	24.0	54	37.0
Grade VIII	13	8.9	25	17.1	38	26.0
Grade IX	24	16.4	30	20.5	54	37.0
Total	56	38.4	90	61.6	146	100.0

parents; (2) home ownership; (3) a record with the family-service agency, which would indicate economic dependence; and (4) telephone service in the home.

Rating of homes.—Homes of the 132 pupils for whom data were available distributed themselves into 11 socio-economic levels according to the classifications on the Sims score card. In Table 2 are shown the percentages of homes represented by the three groups of

pupils falling in each level. If the Sims level of "medium" is considered average, only 37.0 per cent of the pupils in the failure group represent homes which score above the average, while the corresponding percentages for the average group and the success group are 50.0 and 81.4, respectively.

It is apparent that on the basis of the Sims scores the homes of the superior pupils who are failing in school are materially inferior to

TABLE 2

PERCENTAGE DISTRIBUTION, ACCORDING TO SCORE ON SIMS SCORE CARD FOR SOCIO-ECONOMIC STATUS, OF SUPERIOR PUPILS IN THREE ACHIEVEMENT GROUPS

Score	Rank on Sims Card	Success Group	Average Group	Failure Group
36	High*	.....	.....	.....
29–35	Highest	.....	.....	.....
24–28	Very high	11.1	7.7	.....
17–23	High	33.3	19.2	18.5
13–16	Medium high	37.0	23.1	18.5
10–12	Medium	11.1	24.4	33.3
7– 9	Medium low	3.7	16.7	14.8
5– 6	Low	3.7	6.4	11.1
3– 4	Very low	.....	.....	3.7
1– 2	Lowest	.....	2.5	.....
0– 0.9	Low*	.....	.....	.....
Total	.....	99.9	100.0	99.9
Lower quartile	.....	13.0	9.4	8.6
Median	.....	15.9	12.5	11.3
Upper quartile	.....	20.6	17.2	15.1

* Indeterminately.

those of the superior pupils who are more than usually successful in their school work and somewhat inferior to those of superior pupils who are achieving average success in school. Other investigators have reported somewhat similar relations between home and success in school.

Occupations of parents.—The occupational classifications of the fathers of the pupils of the three groups show significant differences from group to group when measured by the Sims score card. In Table 3 are shown the percentages of fathers of these pupils in the five occupational classes.

The fathers of the pupils in the failure group are chiefly unskilled laborers, two-thirds appearing in Class V, the lowest on the Sims score card. Close to nine-tenths (88.9 per cent) of the fathers of this group are either skilled or unskilled laborers, and the other tenth (11.1 per cent) follow occupations that score no higher than Occupational Class III, which may be taken as average for all occupations listed by Sims.

More than half (55.5 per cent) of the fathers of the pupils in the success group follow occupations that fall in Occupational Classes

TABLE 3

PERCENTAGE DISTRIBUTION, ACCORDING TO CLASSIFICATION ON SIMS SCORE CARD FOR SOCIO-ECONOMIC STATUS, OF OCCUPATIONS OF FATHERS OF SUPERIOR PUPILS IN THREE ACHIEVEMENT GROUPS

Occupational Class	Success Group	Average Group	Failure Group
I. Professionals, higher executives	.....	1.3	.....
II. Commercial service, business proprietors	22.2	7.8	.....
III. Artisan proprietors	33.3	2.6	11.1
IV. Skilled laborers, small shop owners	33.3	24.7	22.2
V. Unskilled laborers	11.1	63.6	66.7
Total	99.9	100.0	100.0

II and III, which may be ranked as average or better. A third are small shop-owners, school teachers, and the like and fall in Class III, while 22.2 per cent of them hold commercial positions or are business proprietors and the like (Class II). These percentages are in direct contrast to the finding that only about a tenth (11.1 per cent) of the fathers of the failure group are found in occupations that may be rated as high as Class III, no father of the latter group following an occupation which can be listed higher than Class III. Only about a tenth (11.1 per cent) of the fathers of pupils in the success group are found in the unskilled-labor class.

For the pupils of the average group the fathers' occupations are distributed in the following proportions: slightly more than a tenth (11.7 per cent) fall in Class III or above; approximately a fourth

(24.7 per cent) are skilled laborers; and nearly two-thirds (63.6 per cent) are unskilled laborers.

If the father's occupation is considered as an index to the socio-economic status of the home, it would seem that pupils of the failure group are coming from homes which are socially, economically, and educationally less favored than are those of the success group. The cultural level of homes among pupils of the average group also seems higher than that exhibited by homes among the failure group, though the difference between these two groups seems not to be in strikingly sharp contrast. These results are in line with the findings of other investigations which compare the occupations of fathers and the success and persistence of children in school.

Home ownership.—The majority of families in Kansas City, Kansas, where this investigation was made, own the homes in which they live. So general is this situation that, where it is not the case, inequalities of family means and ambitions may be reflected. Less than half (44.4 per cent) of the pupils of the failure group come from homes owned by their parents, while approximately three-fourths (74.0 per cent) of the pupils in the success group are from homes which are owned by the parents. Slightly more than half (54.0 per cent) of pupils in the average group come from homes owned by their parents. The condition brought out by this comparison may reflect the relative stability of homes represented by these three groups of pupils.

Family-service agency record.—During the year prior to this investigation a far greater proportion of families of the failure group than of the other two groups had been aided by the Family Service Bureau, a relief organization then working through the local Community Chest Association. The percentages of families in the three groups receiving such aid are as follows: failure group, 40.7, average group, 18.0; and success group, 7.4. The decidedly larger percentage of dependent families in the failure group seems to give further evidence that the environmental influences of pupils in this group are definitely inferior to those of the other two groups.

Telephone service in the home.—The home installation of telephone service is by some investigators taken as an index that the cultural

level of the home is above the average. Kornhauser[1] divided the parents of a thousand children in Pittsburgh, Pennsylvania, into "more wealthy" and "less wealthy" groups by basing his division on the possession of a telephone in the home. A survey of the three groups of the present investigation reveals that the percentage of homes with telephones in the failure group (25.9) is less than half the percentage in the success group (59.3) and approximately five-sixths the percentage in the average group (31.5).

On the bases of the last three criteria, the homes represented by the failure group are seen to be of lower economic standing than those represented by pupils of either the success group or the average group. Pupils of the success group seem to be coming from homes that stand out above those from which the pupils in the failure group come. Homes of the average group also show distinct and significant advantages over those of the failure group.

Conclusion.—The results of the investigation made of the homes of these three groups of superior pupils, coupled with the findings of intimate investigations made for each of the twenty-seven pupils in the failure group, seem to indicate that the unfavorable home conditions under which pupils of the failure group live are a contributing factor of major importance in their unsatisfactory school work. Among the possible lines of cause and effect may be suggested the following:

1. Homes of these pupils show a general lack of inspiration and encouragement, and this lack reflects itself in the affected school work.

2. Homes do not provide an adequate place for home study.

3. Lowered vitality and physical weakness, probably caused by undernutrition or malnutrition, appear in some instances.

4. The parents' indifference to the children's school success seems to be responsible for the general lack of ambition, industry, perseverance, and self-confidence evidenced by many pupils in the failure group.

5. Lack of proper school materials with which to work, such as

[1] Arthur W. Kornhauser, "The Economic Standing of Parents and the Intelligence of Their Children," *Journal of Educational Psychology*, IX (March, 1918), 159–64.

books, pencils, and gymnasium equipment, is evident. Home conditions seem definitely responsible for this handicap.

6. The existence of personality difficulties in some instances is evidenced by defiance of discipline, moodiness, bullying, and general inability to get along with schoolmates and teachers. Conditions in the home seem to be responsible, at least in part, for these difficulties.

7. Frequent absences occur, occasioned in some instances by poor health, the lack of proper clothing, or both.

8. Proper parental supervision is lacking. This lack results in an unwise use or an improper distribution of the pupil's time. Some pupils of the failure group were without adult supervision from school dismissal at 2:35 P.M. until 8:00 or 9:00 P.M., when parents arrived home from work, often too weary to be concerned about the children's programs.

9. Possibly parents of pupils in the failure group possess certain undesirable character traits, such as laziness, lack of ambition, or other faulty personality tendencies. In such cases these character traits, passed on to their children either by processes of heredity or through imitation, could easily be contributory to unsatisfactory school records.

AN INFORMATIONAL UNIT ON TIME

GRACE C. SCHAEFFER
Eastern State Normal School, Madison, South Dakota

There are many topics in the subject matter of arithmetic which have deep historical and social significance. Around these topics valuable informational units could be built—units which would lead children to an understanding and an appreciation of our social institutions and which would help children to identify themselves with, and orient themselves in, the world into which they were born. The meaning, the development, and the modern applications of such socially useful institutions as taxes, insurance, barter, money, weights, and measures are known to few, but these topics contain many valuable concepts which are entirely comprehensible and vitally interesting to children of elementary-school age.

It was in accordance with this view of enrichment of the curriculum in arithmetic that a unit on the subject of time measurement was constructed and taught experimentally to a fourth-grade class in the training department at Eastern State Normal School. It is one of a series of informational units in arithmetic developed and taught in this manner by graduate students at the University of Minnesota under the direction of Professor Leo J. Brueckner. The writer wished to collect data concerning the suitability of time measurement as a unit for Grade IV.

In the organization of the unit an attempt was made to follow the Bruner plan.[1] Bruner classifies units according to the purpose for which they are constructed. The theme or generalization type was chosen because in this kind of unit the teacher starts with a generalization or pivotal issue, the understanding of which would contribute to the upbuilding of good citizenship. The content of such a unit must be of secondary importance to the theme itself. This plan, incidentally, offers a fine opportunity for the blending of the two extreme educational points of view of adult-chosen content and chil-

[1] H. B. Bruner, *The Place of Units in Course of Study Construction.* Bulletin No. 2. Pierre, South Dakota: State Superintendent of Public Instruction, 1930.

dren's interests. The theme of this unit was: "Time measurement is a most useful device for promoting civilized co-operation on a large scale."

The ten steps suggested by Bruner were used as a guide in building this unit. They are as follows:

1. Determine what theme or themes are to control the unit.
2. Select the assimilative materials by which the big understandings or themes are to be developed. . . . .
3. Select the activities through which the assimilative materials may be acquired by the pupils. . . . .
4. Write the overview. . . . .
5. Write the generalizations or small themes and the specific objectives. . . . .
6. Write the suggested approaches. . . . .
7. Decide upon possible teaching unit captions which will indicate natural or interesting ways of breaking up the outline for teaching purposes.
8. List possible problems that will suggest a mode of attack from the standpoint of the pupil. . . . .
9. Suggest a few culminating activities. . . . .
10. List the outcomes which you consider essential. If desired, some informal tests may be added for the use of the teacher.[1]

For teaching purposes, the subject of time measurement was divided into four major topics, each with several subtopics:

I. How the cave man told time
   1. The shadow on the rock
   2. The shadow clock
   3. The rope clock
   4. The flower clocks

II. Clocks from long ago to now
   1. The sundial
   2. The water thief
   3. The time candle
   4. The sand glass
   5. Early mechanical clocks
   6. Clocks with pendulums
   7. Smaller clocks and watches
   8. Electricity and clocks

III. How the world gets its time
   1. The causes of day and night
   2. The lines on the globe
   3. Setting the clocks
   4. Standard time
   5. Daylight-saving time

IV. The story of the calendar
   1. What the moon told men
   2. Calendars from long ago to now
   3. Calendar reform

Because reading materials suitable for fourth-grade pupils were meager, the writer prepared mimeographed articles covering all the topics, which were used for class instruction. Tests covering the con-

[1] *Ibid.*, pp. 20–21.

tent of the articles were given to three fourth-grade classes outside the school in which the unit was to be taught to determine whether the tests were comprehensible to fourth-grade pupils and whether any changes were needed for clarification of points of obvious reading difficulty. From a study of standard tests and social-science materials, Mathews[1] determined that, if materials are comprehensible to the point of 75 per cent by children of a grade, the material is suitable for that grade. This criterion was used, and standard tests were given to these groups of children to determine their reading ability. The test scores were helpful in the revision of the articles for the teaching of the unit.

Twenty class periods were used in the development of the unit. Tests were given at the end of each of the four major topics. The character of the lessons varied, and there were other types which might have been given if more time had been available. The following list shows the nature of some of the lessons: simple discussions of what pupils already knew on the topic; work-type reading lessons, in which the pupils read articles to answer questions, to prove statements, to outline points, etc.; preparation of reports; giving of reports; planning of activities; making of replicas of early timepieces (shadow clocks, sundials, water clocks, etc.); coloring maps to show time zones; solving clock problems; and reading timetables.

The subject of time lent itself to a variety of interesting correlations. In the art periods children made a frieze depicting the history of clocks and showing the ways in which man has measured time through the ages. As a part of the assembly program which was the culminating activity of the unit, the frieze was shown to the school as a motion picture and was accompanied by explanatory talks which the pupils had prepared in the language class. In the assembly some pupils took part in a play dramatized from the story of the water clock, while others demonstrated the sundial and other clocks that they had made.

As previously stated, the purpose of this experiment was to assemble some information regarding the possibilities of a unit on time in the fourth-grade curriculum. The following facts were re-

[1] C. O. Mathews, *The Grade Placement of Curriculum Materials in the Social Studies*. Teachers College Contributions to Education, No. 241. New York: Teachers College, Columbia University, 1926.

vealed by the experiment: (1) The subject of time measurement was of genuine interest to this group of pupils during the entire unit. (2) The reading materials of the unit were not too difficult. (3) Illustrative materials, such as odd clocks and pictures of early timepieces and calendars, are available. (4) A large percentage of the pupils were able to understand such terms as "standard time," "calendar reform," "daylight-saving," "pendulum," "rotate," "time-recording," and "telescope." (5) Activities of special interest were the making of early timepieces, the giving of reports on materials read, the reading of stories related to the unit, dramatization of stories, and related art work. (6) To some extent at least, pupils were led to regard arithmetic as something more than a dull subject—to regard it as a social institution devised by man as an instrument of precision.

A few difficulties were encountered in the development of the unit. Suitable reading materials for children were difficult to find. Much time was required by the teacher to gather material on the subject. An understanding of the life of primitive man would have proved helpful. The subjects of calendar development and standard time gave the most difficulty. It might be well to divide the unit and teach this portion in a later grade after the geographic concepts involved (longitude and the movements of the earth) have been developed. Because of the difficulties encountered in the development of the unit, other schools should try out the unit in Grades IV and V in order that the best possible grade placement may be determined.

The story of man's struggles in measuring time parallels the history of civilization. It is a true story, glorious and romantic, with an appeal to both old and young. Children who were taught this unit interested their elders in the subject, and requests came from parents for copies of the articles.

As a unit, the subject of time meets Charters' standards,[1] for it is comprehensible, useful, and interesting. Because the concept of time-measurement functions vitally in the understanding of the world today and because it has proved comprehensible and of dynamic interest to at least one group of pupils, the writer feels that it should be accorded a place in the curriculum.

[1] W. W. Charters, *Curriculum Construction*, pp. 97–100. New York: Macmillan Co., 1923.

A COMPARISON OF THE METROPOLITAN READINESS TESTS AND THE PINTNER-CUNNINGHAM PRIMARY MENTAL TEST

ALBERT GRANT
Psychological Laboratory, Public Schools, Cincinnati, Ohio

The Metropolitan Readiness Tests[1] were devised to measure various aspects of readiness for school instruction among beginning pupils. The authors suggest that these tests, when used as a battery, will show the extent to which pupils are ready to learn first-grade skills and will provide an analysis of difficulties revealed. Inspection of the items which make up the tests suggests that several types of ability generally considered essential to success in Grade I have been included. To date, however, little information about the experience of school workers with this test in practical situations has been published. Information on how well the test predicts first-grade success and how it compares with intelligence tests commonly used at the primary level would be of interest. Findings concerning the latter of these considerations for a large number of cases are presented in this article. It is planned that a later article will deal with the accuracy of the prediction of achievement in Grade I. Specifically, the present study compares the Metropolitan Readiness Tests and the Pintner-Cunningham Primary Mental Test[2] on the basis of the records of more than three thousand beginning first-grade children.

The two tests were given to the entire first-grade enrolment in the Cincinnati public schools in September, 1935. The Pintner-Cunningham test was administered and scored by the staff of the Psychological Laboratory of the Cincinnati schools. The Metropolitan Readiness Tests were given by teachers and scored in the Psychological Laboratory. Since the basis of first-grade membership varies from city to city, it was decided to use only the records of

[1] Gertrude Hildreth and Nellie L. Griffiths, Metropolitan Readiness Tests. Yonkers-on-Hudson, New York: World Book Co., 1933.

[2] Rudolf Pintner and Bess V. Cunningham, Pintner-Cunningham Primary Mental Test. Yonkers-on-Hudson, New York: World Book Co., 1923.

pupils within a definite age range. For purposes of this study the population was therefore limited to the 3,561 first-grade pupils whose ages as of September, 1935, were in the range of five years and eleven months to six years and ten months. These limits were chosen because they constitute approximately the normal age range of pupils entering Grade I in Cincinnati for the first time. The group may therefore be considered representative of beginning first-grade pupils in Cincinnati and of pupils of the age range indicated in comparable cities. Table 1 gives a frequency distribution of the chronological ages as of September, 1935, for the 3,561 pupils included in the study. The pupils included were enrolled in the 65 elementary

TABLE 1

CHRONOLOGICAL AGES AS OF SEPTEMBER, 1935, OF 3,561 FIRST-GRADE PUPILS GIVEN METROPOLITAN READINESS TESTS AND PINTNER-CUNNINGHAM PRIMARY MENTAL TEST

Chronological Age	Number of Pupils
5 years, 11 months through 6 years, 1 month	878
6 years, 2 months through 6 years, 4 months	1,052
6 years, 5 months through 6 years, 7 months	926
6 years, 8 months through 6 years, 10 months	705
Total	3,561
Median age	6 years, 4.57 months

schools within the system. The number of colored children included was 631, or 17.7 per cent of the total.

The Pintner-Cunningham test yields ratings which may be expressed in terms of intelligence quotients. Table 2 gives a distribution of the intelligence quotients achieved by the 3,561 pupils. The average intelligence quotient of this group was slightly below 100, which is usually considered characteristic of a random sampling of children in any given age group. The median for the white children as a group proved to be 100.3, and for the colored children it was 85.1.

A distribution of the total scores for the 3,561 Cincinnati pupils on the Metropolitan Readiness Tests is given in Table 3. A comparison of these data for Cincinnati pupils with corresponding data for the pupils upon whom the norms are based is of interest. The *Manual of Directions* gives a distribution of total scores for 4,440 pupils with

ages between 6–0 and 6–11, practically the same age range as that involved in the Cincinnati group. The median of the test authors'

TABLE 2

DISTRIBUTION OF 3,561 FIRST-GRADE PUPILS ACCORDING TO INTELLIGENCE QUOTIENTS ON PINTNER-CUNNINGHAM PRIMARY MENTAL TEST ADMINISTERED IN SEPTEMBER, 1935

Intelligence Quotient	Number of Pupils	Intelligence Quotient	Number of Pupils
145–49	2	85–89	390
140–44	5	80–84	321
135–39	26	75–79	235
130–34	64	70–74	167
125–29	107	65–69	78
120–24	150	60–64	17
115–19	217	55–59	2
110–14	299		
105– 9	323	Total	3,561
100–104	388	Median	97.0
95–99	393	Mean	97.6
90–94	377	Standard deviation	16.2

TABLE 3

DISTRIBUTION OF 3,561 FIRST-GRADE PUPILS ACCORDING TO TOTAL SCORES ON METROPOLITAN READINESS TESTS ADMINISTERED IN SEPTEMBER, 1935

Score	Number of Pupils	Score	Number of Pupils
120–24	1	45–49	176
115–19	10	40–44	129
110–14	32	35–39	109
105– 9	91	30–34	61
100–104	137	25–29	36
95–99	201	20–24	32
90–94	261	15–19	19
85–89	291	10–14	10
80–84	275	5– 9	9
75–79	336	1– 4	1
70–74	321		
65–69	296	Total	3,561
60–64	277	Median	72.7
55–59	228	Mean	71.4
50–54	222	Standard deviation	20.9

distribution is 76.6, the mean 74.4, and the standard deviation 21.2. The Cincinnati group achieved slightly lower and somewhat less variable scores than the corresponding age group involved in the

derivation of the test norms. If the latter group is assumed to be of normal intelligence, the finding of a somewhat lower average is consistent with the fact that the average intelligence quotient on the Pintner-Cunningham test for the Cincinnati group when colored children were included proved to be slightly below 100.

Since the Metropolitan and the Pintner-Cunningham tests were given to the same pupils, it is possible to determine the relation between the two tests by correlational procedure. Table 4 gives the

TABLE 4

CORRELATIONS BETWEEN SCORES ON PINTNER-CUNNINGHAM PRIMARY MENTAL TEST AND SCORES ON METROPOLITAN READINESS TESTS FOR 3,561 FIRST-GRADE PUPILS

Subtests of Metropolitan Tests Correlated with Pintner-Cunningham Test	Correlations in Age Groups				
	5 years, 11 months through 6 years, 1 month	6 years, 2 months through 6 years, 4 months	6 years, 5 months through 6 years, 7 months	6 years, 8 months through 6 years, 10 months	Whole Group
Test 1.....	.58±.015	.59±.014	.59±.014	.57±.017	.59±.007
Test 2.....	.67±.013	.68±.011	.70±.011	.64±.015	.68±.006
Test 3.....	.58±.015	.61±.031	.61±.014	.64±.015	.61±.007
Test 4.....	.57±.015	.56±.014	.54±.016	.55±.018	.56±.008
Test 5.....	.69±.012	.71±.010	.72±.011	.71±.013	.72±.005
Test 6.....	.56±.016	.59±.136	.64±.013	.57±.017	.58±.008
All tests..	.79±.009	.83±.007	.81±.008	.79±.010	.81±.004

coefficients of correlation between scores on the various parts of these tests for different age groups and for the whole group. Between the total scores of the two tests the coefficient of correlation is .81±.004. It is not likely that the reliability coefficient of either of these tests is much higher. Furthermore, the two tests correlated somewhat more closely than existing primary intelligence tests correlate with one another. Sangren,[1] for example, found the following correlations, based on the scores of one hundred first-grade children, between the Pintner-Cunningham test and each of the other tests named: Rhode Island Intelligence Test, .639; Kingsbury Primary

[1] Paul V. Sangren, "Comparative Validity of Primary Intelligence Tests," *Journal of Applied Psychology*, XIII (August, 1929), 401.

Group Intelligence Scale, .642; Pressey Primary Classification and Verifying Tests, .643; Stanford Revision of the Binet-Simon Scale, .655; Detroit First-Grade Intelligence Test, .732; Haggerty Intelligence Examinations, .753; Otis Group Intelligence Scales, .759. In the present study the correlations between the individual subtests of the Metropolitan tests and the whole Pintner-Cunningham test range from .56±.008 for Test 4 to .72±.005 for Test 5.

Although the data in Table 4 show the two tests to be closely correlated, it does not follow that they are equally good measures of readiness for first-grade instruction. To establish this assumption, the ratings on these tests will have to be compared with measures of the first-grade achievement of the pupils involved. As has already been stated, it is planned to make this comparison the basis of a later study. The remainder of this article will analyze somewhat more fully the scores which result from the different parts of the Metropolitan tests.

One of the unique features of the Metropolitan Readiness Tests is that each of the six individual tests is devised to measure a particular aspect of readiness. The resulting scores are therefore analytical of the child's readiness and can be used to advantage by the teacher in planning what instructional activity should be used. Unfortunately no norms for these individual tests are given. The scores achieved by the 3,561 pupils in Cincinnati provide a preliminary basis for such norms. Distributions of these scores are given in Table 5.

Test 1 requires the detection of similarities and differences in pictures and symbols. It contains twenty-three pairs of pictures, figures, symbols, and letter combinations. Eleven of the pairs are alike, and the remaining twelve are unlike. The distribution of the scores of the 3,561 Cincinnati children on Test 1 shows that 11.5 per cent of the pupils made zero scores. The failure of this test to differentiate among the abilities of so large a proportion of the pupils tested is of course an objectionable feature. An inspection of some of the actual responses associated with these zero scores revealed that many children apparently failed to understand the directions given. It also revealed that these zero scores were not associated with zero scores on other parts of the test battery. The right-minus-

TABLE 5

DISTRIBUTION OF SCORES ON INDIVIDUAL TESTS 1–6 OF METROPOLITAN READINESS TESTS FOR 3,561 FIRST-GRADE PUPILS TESTED IN CINCINNATI IN SEPTEMBER, 1935

Score	Number of Pupils
Test 1 (Similarities):	
22–23	26
20–21	67
18–19	256
16–17	305
14–15	429
12–13	452
10–11	466
8– 9	379
6– 7	349
4– 5	235
2– 3	143
1	44
0	410
Total	3,561
Median	11.0
Mean	10.5
Standard deviation	5.7
Test 2 (Copying):	
11	381
10	340
9	347
8	292
7	260
6	240
5	239
4	241
3	313
2	349
1	297
0	262
Total	3,561
Median	6.3
Mean	6.2
Standard deviation	3.6
Test 3 (Vocabulary):	
19	4
18	17
17	32
16	99
15	175
14	343
13	531
12	582
Test 3—*continued:*	
11	541
10	392
9	284
8	210
7	135
6	76
5	41
4	30
3	22
2	17
1	10
0	20
Total	3,561
Median	12.0
Mean	11.7
Standard deviation	2.9
Test 4 (Sentences):	
15	644
14	733
13	693
12	471
11	359
10	244
9	124
8	83
7	63
6	49
5	33
4	23
3	10
2	11
1	8
0	13
Total	3,561
Median	13.4
Mean	12.8
Standard deviation	2.6
Test 5 (Numbers):	
40	4
38–39	24
36–37	62
34–35	94
32–33	151

TABLE 5—*Continued*

Score	Number of Pupils	Score	Number of Pupils
Test 5—*continued:*		Test 6 (Information):	
30–31	178	16	118
28–29	224	15	383
26–27	212	14	614
24–25	265	13	624
22–23	233	12	544
20–21	273	11	405
18–19	293	10	276
16–17	312	9	171
14–15	318	8	140
12–13	313	7	76
10–11	225	6	68
8– 9	158	5	35
6– 7	101	4	33
4– 5	62	3	25
2– 3	36	2	16
0– 1	23	1	11
		0	22
Total	3,561	Total	3,561
Median	19.6	Median	12.9
Mean	20.2	Mean	12.3
Standard deviation	8.3	Standard deviation	2.9

wrong method of scoring this test is sometimes responsible for a number of zero scores even though the children in question have marked some items correctly. Possibly the directions for this test and the method of scoring it could be so modified as to reduce the number of zero scores without reducing the test's validity.

Test 2 consists of eleven different designs—geometrical figures, letters, and numerals—which are to be copied by the pupil. An examination of the distribution of the scores on this test shows that 7.4 per cent of the pupils made zero scores and that an even larger proportion (10.7 per cent) made maximum scores. The distribution tends to be rectangular but is bimodal and is skewed with an increasing concentration of scores toward the upper end, 30 per cent of the pupils having scores equal to or within two points of the maximum. The nature of the distribution would indicate that the test should be made more discriminating at both the upper and the lower ends. This result might be effected by the addition of simpler and more difficult items.

Tests 3 and 4 require the pupil to mark pictures corresponding to descriptions read by the examiner. The frequency distributions of the scores achieved by the Cincinnati pupils on Test 3 indicate that few pupils made either zero or maximum scores. Most of the scores are concentrated toward the center, over half (57.5 per cent) lying within the range of 10–13, inclusive. It is apparent that the test differentiates only among pupils who do very well or very poorly.

A study of the frequencies on Test 4 shows a piling-up of scores at the upper end of the distribution, 71.4 per cent of the scores being equal to or within three points of the maximum. Evidently the test differentiates only among children who have very little of the abilities measured. In its present form the inclusion of this test in the battery merely adds, in most cases, a constant quantity to the pupil's total score. The test needs to be made much more difficult if it is to be discriminating for first-grade pupils.

Test 5 is intended to measure the pupil's knowledge of number. The test involves number vocabulary, counting, ordinal numbers, recognition of written numbers, writing numbers, interpreting number symbols, the meaning of number terms, the meaning of fractional parts, recognition of forms, telling time, and the use of numbers in simple problems. An analysis of the frequencies for this test shows that the scores distribute themselves more nearly in the form of a normal distribution than do those for any of the other individual tests. From the standpoint of the evidence yielded as to variability among children in the abilities measured, this test seems to be the best in the battery. It is of interest to note in Table 4 that this test gave the highest correlation with the Pintner-Cunningham test.

Test 6 measures common knowledge by means of a multiple-choice picture test of sixteen items. The child is required to select from a row of four pictures the one that satisfies the examiner's description. The frequency distribution of the scores on this test is heavily skewed in that a large proportion of the scores are concentrated toward the upper end of the scale. Nearly 50 per cent of the cases lie within the range 13–16, inclusive. Consequently the test yields practically no evidence on the variability among a large proportion of children with reference to the factors measured.

CONCLUSIONS

The conclusions concerning the Metropolitan Readiness Tests suggested by the data in the tables are about as follows: (1) The Metropolitan Readiness Tests, when applied to beginning first-grade children, yield ratings which are highly correlated with ratings on the intelligence of such pupils based on the Pintner-Cunningham Primary Mental Test. Further study is necessary to determine which of the two tests yields the better prediction of success in Grade I. (2) Test 1 (Similarities) of the Metropolitan tests yields zero scores for a large number of children but otherwise gives satisfactory evidence of variability among beginning first-grade children. (3) Test 2 (Copying) fails to differentiate among a large group of children who make zero scores and among a somewhat larger group who secure maximum scores. (4) Test 3 (Vocabulary) yields a large proportion of scores which tend to concentrate within a small range in the middle of the scale. Hence, it differentiates only among pupils who have very little and those who have a great deal of the abilities measured. (5) Test 4 (Sentences) yields a preponderance of maximum or nearly maximum scores. (6) Test 5 (Numbers) is the most satisfactory of the individual tests from the standpoint of variability and absence of skewness in the distribution of the scores. (7) Test 6 (Information) yields scores which tend to concentrate toward the upper end of the scale. Hence, it serves to pick out only pupils with very little of the abilities measured.

TRENDS IN THE TEACHING OF HISTORY IN THE ELEMENTARY SCHOOL

J. C. SEEGERS AND ALICE PRICE
Temple University

The purpose of this article is to state major trends in the selection of content and the method of teaching history in the elementary school as those trends are revealed in periodical publications from 1899 through 1934. The data were obtained by consulting the several guides to periodical literature and by reviewing all articles which seemed pertinent. The following publications were consulted:

Education
Educational Method
Elementary School Journal (*formerly* Elementary School Teacher)
Historical Outlook (*formerly* History Teacher's Magazine, *now published as* Social Studies)
Journal of Educational Psychology
Journal of Educational Research
Journal of Experimental Pedagogy
Journal of the National Education Association
Progressive Education
Reports of the American Historical Association
Research Bulletin of the National Education Association
School Review
School and Society (*formerly* Educational Review)
Social Frontier
Teachers College Record
Yearbooks of the Department of Classroom Teachers
Yearbooks of the Department of Supervisors and Directors of Instruction
Yearbooks of the Department of Superintendence
Yearbooks of the National Society for the Study of Education

The reports of the Committee of Seven and the Committee of Eight of the American Historical Association were given especial attention.

All articles which might conceivably bear on the subject were read, and 107 were selected as depicting trends clearly and definitely enough to warrant inclusion. The period, 1899–1934, inclusive, was divided into five "cycles" of seven years,[1] partly because it was convenient and partly because seven years is the elementary-school span

[1] One cycle, 1920–27, included eight years.

of the child who enters kindergarten and continues through Grade VI without interruption or acceleration. The distribution of the articles with reference to trends and points of emphasis is displayed in Table 1. When one article exhibited more than one trend, each trend was tabulated.

TABLE 1

HISTORICAL TOPICS OR TRENDS EMPHASIZED IN EDUCATIONAL LITERATURE FROM 1899 TO 1934, INCLUSIVE, AND FREQUENCY OF MENTION OF EACH

TOPIC OR TREND	FREQUENCY OF MENTION					
	1899 to 1905	1906 to 1912	1913 to 1919	1920 to 1927	1928 to 1934	Total
1. Cause-and-effect relations	10	6	9	5	1	31
2. Correlation and integration	6	10	2	4	6	28
3. Type lessons	.....	6	1	.....	.....	7
4. Topical method	1	.....	.....	.....	.....	1
5. Problem method	.....	1	2	3	.....	6
6. Unit approach	.....	1	.....	2	1	4
7. Interest and experience of child	7	.....	1	2	2	12
8. Activity and construction work	8	3	7	6	1	25
9. Psychological approach	2	.....	.....	.....	1	3
10. Visual aids	1	3	4	2	6	16
11. Supplementary materials	2	1	.....	.....	1	4
12. Dramatizing	1	.....	.....	1	2	4
13. Development of tolerance	1	.....	1	1	.....	3
14. Decreasing factual material and memory work	4	6	5	.....	1	16
15. Need of trained teachers	2	5	5	1	1	14
Total	45	42	37	27	23	174

In this table "Correlation" is used to signify the organization and teaching of subjects in parallel manner so that the children may be made conscious of intersubject relations. "Integration" is used to describe the process whereby various subjects contribute jointly to the solution of broad topics or general problems. "Type lessons" are lessons providing a general pattern on which further study is to be based. "Topical method" implies logical organization of history subjects into significant units. "Problem method" emphasizes reflective thinking growing out of a recognized problem situation. By "Unit approach" is meant that process in which large movements are

studied because interest has been aroused by recognition or manipulation of environmental conditions. "Psychological approach" emphasizes the doctrine of interest and accommodation of materials to the needs and the status of the learner. It should be understood that these definitions are supplied merely to interpret Table 1. This paragraph is not intended to be a lexicon which others need or should accept.

It is significant that the ideas of stressing causal relations, correlation, and integration, often considered of recent origin, were emphasized more frequently in the earlier than in the later periods. Years ago the writers in professional journals were pointing out the desirability of an interpretative approach. Of course, there is no evidence in the table to show whether teachers actually followed the course charted by these writers, but the trend in the articles is clear.

Little attention is paid in these articles to the topical method of presenting history, but it is interesting to see that type lessons, then the problem method, then the unit approach were successively emphasized.

Throughout there has been a great deal of emphasis on the appeal to child nature. Each period contributed to some phase of this trend. It is noteworthy that during the earliest period seventeen articles treated activity and construction work, advocated a psychological approach, or emphasized the importance of considering child nature. One or all of these trends was treated during each of the periods, but the heaviest frequencies were in the first period. Of course, the approach was different in the various periods. The psychology of 1900 was quite different from that of 1934, and there was variation in the type of activity advocated and in the extent to which activity and learning were identified. Nevertheless the importance of adapting procedure in consonance with child nature is a recurring theme.

There is a natural increase of emphasis on the use of visual aids, since visual materials are more plentiful now than they were in 1900. It is surprising, however, to find little attention paid to the use of other supplementary materials and to dramatization.

The social objectives of history were treated from time to time in a more or less general or casual manner, but only in the three articles listed under "Development of tolerance" was there sufficient em-

phasis to permit classification. These three articles strongly urged that history be used to develop the tolerance which must underlie human understanding, especially international or intersectional understanding.

It may be that the decreasing number of pleas for the elimination of the purely memoriter approach is indicative of a victory gained. Since 1920 writers have apparently thought it unnecessary to protest against overemphasis on factual materials or memory work.

It is strange that the last two periods record few articles stressing the need of better-trained teachers. While elementary-school teachers now undoubtedly receive better general training than t y received before 1920, it is doubtful whether the nature of their training in history and the other social sciences warrants a relaxation of effort. Especially is there no warrant for failure to train teachers if integration, correlation, general activities, and the problem approach are to receive continued emphasis, as Table 1 indicates they may. These approaches necessitate interpretation and organization which are effective only if the teacher has a rich background of training and experience.

It is a conjectural but not unreasonable explanation to suggest that the decrease in the number of articles in the period since 1919 may result not from decreasing interest in the teaching of history but from increasing interest in a unified or activity curriculum of which history is a part. In fact, many such programs have employed the social sciences, especially history, as a core. A study of articles treating the social sciences thus would probably show emphasis on the development of social attitudes, on problem-solving, and on the contribution of historical materials to an understanding of the social order. In recent years many such articles have appeared, but these were not included in this study, which considered articles dealing with history alone.

SELECTED REFERENCES ON ELEMENTARY-SCHOOL INSTRUCTION

II. The Subject Fields

This list of references is the second in a series of three lists relating to instruction at the elementary-school level. The preceding list, appearing in the September number of the *Elementary School Journal*, contains items on the curriculum, methods of teaching and study, and supervision. The present list and the next list in the series include references on these same major aspects of instruction, but the items are grouped by subject fields.

READING[1]

William S. Gray

439. Becker, May Lamberton. *First Adventures in Reading*. New York: Frederick A. Stokes Co., 1936. Pp. xiv+286.

Provides for parents a series of interesting suggestions concerning desirable reading experiences for children of different ages.

440. Betts, Emmett A. "Retardation in Reading," *The Role of Research in Educational Progress*, pp. 186–91. Official Report of the American Educational Research Association, 1937. Washington: American Educational Research Association of the National Education Association, 1937.

Presents conclusions concerning reading deficiencies drawn from "approximately two thousand publications covering a number of areas related to reading problems."

441. Betts, Emmett, A., and Donnelly, Helen E. "Systematic Instruction for Retarded Readers," *Journal of Exceptional Children*, III (February and April, 1937), 66–74; 89, 118–25.

Reports the nature of the difficulties discovered through clinical diagnosis in the case of thirty-two poor readers, the corrective procedures adopted, and the results.

442. Broening, Angela M. "Literary Merit and the Winnetka Formula for Grading Children's Books," *The Role of Research in Educational Progress*, pp. 148–52. Official Report of the American Educational Research

[1] See also Items 401 (Thorndike), 422 (Postel), and 425 (Taylor) in the list of selected references appearing in the September, 1937, number of the *Elementary School Journal*.

Association, 1937. Washington: American Educational Research Association of the National Education Association, 1937.

Presents evidence supporting the view that wise use of the Winnetka formula does not level down the creative reading and expression of pupils.

443. COHEN, LOUIS. "A Comparison of the Value of Extensive and Intensive Reading in Improving Reading Ability in an Occupational School," *Baltimore Bulletin of Education*, XIV (September–October, 1936), 60–62.

Describes the methods adopted for improving reading ability with two paired groups of pupils in the upper grades and compares their progress during a period of ninety-three school days.

444. CRAMER, JOHN FRANCIS. "Australian Tests and American Pupils," *Elementary School Journal*, XXXVII (September, 1936), 17–24.

Compares the average scores made by 814 pupils in two school systems of Washington with those made by six Australian states on the Australian arithmetic and reading tests.

445. CUFF, NOEL B. "Study Habits in Grades Four to Twelve," *Journal of Educational Psychology*, XXVIII (April, 1937), 295–301.

Reports the methods used and the findings of a study involving 1,250 pupils to determine the relative importance of study habits among dull and bright children, pupils of inferior and superior achievement, for the youngest and oldest pupils in given groups, and for different grade groups.

446. DOLCH, E. W. "The First Step in Remedial Reading," *Elementary School Journal*, XXXVII (December, 1936), 268–72.

Shows the percentage that a basic sight vocabulary of 220 words is of the total number of running words in school textbooks in four subjects—reading, arithmetic, geography, and history—in Grades I–VI, inclusive. Gives also the number of these basic sight words known by 65 pupils in a fourth-grade remedial-reading group before and after four weeks of special training.

447. FARRIS, L. P. "Visual Defects as Factors Influencing Achievement in Reading," *Journal of Experimental Education*, V (September, 1936), 58–60.

Compares the reading achievement of 384 pupils in the seventh grade with that of a control group in the same grade of like chronological age and ability but "different in visual acuity."

448. FEATHERSTONE, W. B. "The Speyer School for 'Slow-reading' Children," *Teachers College Record*, XXXVIII (February, 1937), 365–80.

Describes the scope and the character of the program provided for children of less-than-average ability and considers some of the special problems encountered.

449. FRIEDMAN, KOPPLE C., and NEMZEK, CLAUDE L. "A Survey of Reading Interest Studies," *Education*, LVII (September, 1936), 51–56.

Presents an annotated bibliography of thirty-eight studies of reading interests and summarizes significant findings.

450. GATES, ARTHUR I. "The Psychological Basis of Remedial Reading," *Educational Record*, Supplement No. 10, XVII (October, 1936), 109–23.

Discusses the frequency of various types of reading disabilities, their causes, and various aspects of remedial instruction.

451. GRAY, WILLIAM S. "Curriculum Investigations: Reading," *Review of Educational Research*, VII (April, 1937), 139–42, 199–201.

Summarizes essential findings of thirty-three studies relating to reading as a school subject.

452. GRAY, WILLIAM S. "Summary of Reading Investigations (July 1, 1935, to June 30, 1936)," *Journal of Educational Research*, XXX (April, 1937), 553–76.

Points out the major types of studies reported in a hundred published investigations and summarizes the most important findings.

453. HAEFNER, RALPH. "The Influence of the Typewriter on Reading in the Elementary School," *Elementary English Review*, XIII (December, 1936), 291–94.

Summarizes the results of studies of the influence of typewriting on comprehension, perception, and eye-movements in reading.

454. HEGGE, T. G., and WARD, L. B. "Remedial Reading Methods," *American Journal of Orthopsychiatry*, VI (July, 1936), 421–30.

Contrasts methods in which the primary emphasis is in reading as a response to meanings and contextual materials and as a vocal or subvocal response to visual word symbols and their parts. Describes the Hegge-Kirk "Remedial Reading Drills" as an example of the second type of approach.

455. HENDERSON, ELLEN C. *Reading and Speaking Techniques for Teachers in Junior High and Grade Schools*. Chicago: Improvement Publishing Co., 1937. Pp. 218.

Discusses various problems involved in developing "effective oral reading and speaking skills, and correct use of the speech mechanism."

456. HILDRETH, GERTRUDE. *Learning the Three R's*. Minneapolis, Minnesota: Educational Publishers, Inc., 1936. Pp. x+824.

Discusses current problems in teaching reading under the following headings: the reading process, changes in reading practice, reading readiness, reading deficiency, reversal errors in reading and writing, diagnostic methods in reading, remedial work and improved instruction in reading, improving reading techniques.

457. KNIGHT, PEARLE E., and TRAXLER, ARTHUR E. *Read and Comprehend*. Boston: Little, Brown & Co., 1937. Pp. x+234.

Discusses the importance of reading and presents suggestions and exercises for pupils relating to extensive and intensive reading.

458. LaGrone, Truda Gough. "An Analytical Study of the Reading Habits of Deaf Children," *Journal of Experimental Education*, V (September, 1936), 40–57.

Presents data secured from ninety-four pupils, varying from Grade I to college-preparatory level, to determine (1) the presence or absence of developmental stages in three fundamental elements of the reading habit and (2) the relation between progress in these elements and other measurable factors related to the reading process.

459. Leland, Bernice. "Case Study Approach to Difficulty in Reading," *Childhood Education*, XIII (April, 1937), 374–78.

Discusses the relation between non-conforming behavior and inability to read, the sources of reading disability, the need for the use of various remedial techniques, and the importance of early detection of reading difficulties.

460. Monroe, Marion; Backus, Bertie; and Principals, Counselors, and Teachers of the Washington, D.C., Public Schools. *Remedial Reading*. Boston: Houghton Mifflin Co., 1937. Pp. xii+172.

Describes the motives for the remedial-reading project as a part of the character-education experiment in Washington, D.C.; discusses general principles underlying diagnosis of reading disabilities and remedial instruction; and outlines the methods used and the results attained in elementary, secondary, and vocational schools.

461. Nolte, Karl F. "Simplification of Vocabulary and Comprehension in Reading," *Elementary English Review*, XIV (April, 1937), 119–24, 146.

Compares the comprehension scores made by 1,112 sixth-grade pupils in eight school systems on a reading selection in its original form and in simplified forms with the vocabulary limited to (1) the first 2,500 of the Thorndike word list and (2) the words of the Ogden Basic English list.

462. Orton, Samuel Torrey. *Reading, Writing and Speech Problems in Children*. New York: W. W. Norton & Co., Inc., 1937. Pp. 216.

Discusses at length various types of disorders in the development of the language faculty, including developmental alexia and developmental word deafness.

463. Phillips, Marina, and Coe, Ethel C. "How the Reading Program of a Rural School System Was Improved," *Northern Illinois State Teachers College Bulletin*, Vol. V, No. 1 (1935–36), pp. 1–22. De Kalb, Illinois: Northern Illinois State Teachers College.

Describes the steps taken and the results secured in improving the reading of elementary-school pupils in a county of northern Illinois.

464. Seegers, J. C. "A Study of Children's Reading," *Elementary English Review*, XIII (November, 1936), 251–54.

Reports the results of "an analysis of the undirected, uncontrolled reading of books done outside school hours by 924 pupils of a city school."

465. *The Teaching of Reading—A Second Report.* Thirty-sixth Yearbook of the National Society for the Study of Education, Part I. Bloomington, Illinois: Public School Publishing Co., 1937. Pp. viii+442.

Summarizes recent progress in reading, identifies current problems, considers the nature and types of reading, and its place in the curriculum, outlines a comprehensive reading program extending from the kindergarten to the university and considers numerous specific teaching problems in relation to reading.

466. TILLEY, HARVEY C. "A Technique for Determining the Relative Difficulty of Word Meanings among Elementary School Children," *Journal of Experimental Education*, V (September, 1936), 61–64.

Summarizes data secured from several hundred children in Grades III, V, and VII through the use of multiple-choice and self-appraisal types of tests to determine the relative difficulty of word meanings when the words are presented both in isolation and in context.

467. TINKER, MILES A. "Eye Movements in Reading," *Journal of Educational Research*, XXX (December, 1936), 241–77.

Presents a detailed summary of published researches related to eye-movements in reading.

468. WAGNER, GUY W. "The Maturation of Certain Visual Functions and the Relationship between These Functions and Success in Reading and Arithmetic," *Studies in Psychology of Reading*, I, 108–46. University of Iowa Studies in Psychology, No. 21. Psychological Monographs, Vol. XLVIII, No. 3. Princeton, New Jersey: Psychological Review Co., 1937.

Summarizes the results of the Betts Ready To Read Tests of fusion, amplitude of fusion, lateral imbalance, visual acuity, and stereopsis given to approximately 850 pupils in the kindergarten and Grades I–VI, inclusive, of the Syracuse, New York, public schools.

469. *We Learn English.* A Preliminary Report of the Achievement of Spanish-speaking Pupils in New Mexico. Albuquerque, New Mexico: San Jose Experimental School, University of New Mexico, 1936. Pp. 34+61 tables.

Summarizes the results of a five-year experiment with Spanish-American children to improve the efficiency and appropriateness of the instruction provided, with special emphasis on reading and speaking English.

470. WITTY, PAUL A., and KOPEL, DAVID. "Studies of Eye-Muscle Imbalance and Poor Fusion in Reading Disability: An Evaluation," *Journal of Educational Psychology*, XXVII (December, 1936), 663–71.

Reviews the findings of various investigations to determine the relation of eye-muscle imbalance and poor fusion to reading disability.

471. WRIGHTSTONE, J. WAYNE. "Diagnosing Reading Skills and Abilities in the Elementary Schools," *Educational Method*, XVI (February, 1937), 248–54.

Presents a suggested list of diagnostic instruments relating to skills and abilities in reading and describes a class project in remedial reading.

472. ZEHRER, FREDERICK A. "Methods of Remedial Reading Instruction at the High-School Level," *Harvard Teachers Record*, VI (June, 1936), 154–62.

Presents a series of practical suggestions for overcoming reading deficiencies and describes books and compiled exercises which supply excellent practice material for retarded readers.

ENGLISH[1]

R. L. LYMAN

473. BARNES, WALTER. "Language as Social Behavior," *Educational Method*, XVI (March, 1937), 275–88.

Throws light on certain concepts of language which have dominated American schools and analyzes a concept of language as social behavior, which seems more complete and satisfying.

474. CASTEEL, JOHN L. "The Influence of the Audience in Oral Composition," *English Journal*, XXV (January, 1936), 58–61.

Explains that the teaching of oral composition calls for an understanding of how to aid the pupil in making effective adjustments and in achieving self-control, poise, and emotional release.

475. COTNER, EDNA. "English in the Integrated Program," *Elementary English Review*, XIV (February, 1937), 52–54.

Presents practical problems in correlating English composition, literature, social studies, and phases of music and art.

476. CUTRIGHT, PRUDENCE. "The Problem of Grade Placement," *Proceedings of the National Education Association*, LXXIII (1935), 630–31.

Discusses the increasing tendency on the part of committees in the field of English composition to produce ungraded courses of study.

477. DAWSON, MILDRED A. "Recent Language Textbooks," *Elementary English Review*, XIV (March, 1937), 89–95.

Analysis of recent textbooks in language for Grade VI reveals that the authors have emphasized the following progressive tendencies: functional centers, repetition, socialized procedures, and cumulative standards. They have neglected spelling, enrichment for superior pupils, nonfunctional grammar, and inventories of expressional needs.

478. DYER, HENRY S. "Drill and Creative Work in Language Expression," *Elementary English Review*, XIII (November, 1936), 263–68.

[1] See also Item 389 (Dawson) in the list of selected references appearing in the September, 1937, number of the *Elementary School Journal*.

Sets forth three general principles: (1) that creative work should precede drill work in emphasis and practice, (2) that the English habits which free the mind for creative work must be secured through intensive and extensive drill, and (3) that drill work should be adapted to individual needs.

479. FALK, ETHEL MABIE. "Adjustment through English Expression," *English Journal*, XXVI (May, 1937), 381–88.

Discusses the importance, in the teaching of English, of considering the language characteristics of individuals and lists eight probable types of pupils.

480. FRIES, CHARLES C. "First Steps in a Workable Program of Teaching the English Language," *English Journal*, XXV (February, 1936), 150.

Makes a plea for definite objectives and for the stimulation among pupils of habits of observation of actual usage.

481. FRISTOE, DEWEY. "The Teaching of Language in the One-Room Country School," *Elementary English Review*, XIV (February, 1937), 35–41.

Discusses research which reveals that the teaching of language in one-room rural schools is inferior to that given in graded schools and points out difficulties peculiar to language instruction under three classifications: (1) instruction, (2) correlation, and (3) community attitude.

482. GILLETT, NORMA. "A Correlated Curriculum in Composition and the Social Studies," *Elementary English Review*, XIV (March, 1937), 80–86.

Reports a study in Grade III of the University Elementary School, University of Iowa, to evaluate in terms of results a program in which composition was correlated with a study of pioneer life.

483. GREENE, HARRY A. "Principles of Method in Elementary English Composition," *Elementary English Review*, XIV (March, 1937), 103–9.

Summary of the Fifth Annual Research Bulletin of the National Conference on Research in Elementary School English, giving bibliography of recent studies in the field.

484. JOHNSON, M. IRENE. "The Radio in Teaching Fifth and Sixth Grade English," *Elementary English Review*, XIV (January, 1937), 25–27, 32.

Reports procedures found to be desirable in utilizing radio programs in elementary English classes.

485. JOHNSON, ROY IVAN. "The State of the Language Reconsidered," *Elementary English Review*, XIV (March, 1937), 77–79, 95.

Presents arguments to support the acceptance of change in our language in response to recent pleas for the *status quo* in English.

486. LEARY, GENEVIEVE M. "Free Compositions as an Aid to the Teacher in Child Guidance," *Journal of Experimental Education*, V (September, 1936), 26–29.

Reports a study in twelve elementary classrooms in three laboratory schools of New Haven, Connecticut, which shows how free compositions of children may be used by teachers in child guidance.

487. McKee, Paul. "Seven Matters of Importance in the Teaching of Language," *Education*, LVII (February, 1937), 356–59.

Presents points on teaching language as gained through a study of modern textbooks, courses of study, and work in classrooms. Stresses the need for revising of textbooks to include all language activities which have significance for the child and for the persistent use of good English in all school activities.

488. Meade, Richard A. "Literature in the Virginia Course," *English Journal*, XXVI (April, 1937), 302–7.

Describes the tentative course of study in literature for Grade VIII of Virginia's public schools—a functional organization of literary materials.

489. Phillips, Delight. "A Unit on the Use of Radio," *English Journal*, XXVI (January, 1937), 33–38.

Describes the careful use of radio around one unit in an eighth-grade English class.

490. Pooley, Robert C. "The Levels of Language," *Educational Method*, XVI (March, 1937), 289–98.

Discusses: (1) six levels or areas of language: (*a*) illiterate level, (*b*) the homely level, (*c*) the informal-standard level, (*d*) the formal-standard level, (*e*) the literary level, and (*f*) the technical level; (2) the application of levels of English usage to the teaching of English; and (3) examples of successful teaching of language.

491. Shankle, George E. "Why Teach English Grammar," *Education*, LVII (December, 1936), 233–35.

Contends that "mastery of the basic principles of English grammar is just as essential to the student of English as an intellectual command of the laws and fundamental principles of chemistry, physics, biology, or of the other sciences is necessary to the scientist."

492. Storm, Grace E. "Social Studies, a Basis for English," *Elementary English Review*, XIV (February, 1937), 42–44.

Discusses the correlation between social studies and English, showing that emphasis on the expressional aspects of the social studies adds stimulation and vitality to the English classes.

493. Watson, E. H. A. "Good English the Responsibility of All Teachers," *School*, XXIV (February, 1936), 469–73.

A discussion based on research from French schools, American schools, and Canadian schools, showing how composition-teaching limited to English classes develops a composition awareness or complex that functions only during those classes instead of establishing habits of good English which function in other classes and outside of school.

494. Zyve, Claire Turner. "English—an Integral Part of All School Activities," *Elementary English Review*, XIV (February, 1937), 49–51.

Discusses the need for giving attention in English composition to pupils' own experiences and for providing opportunities for pupils to do independent work in English.

SPELLING

FREDERICK S. BREED

495. ASHBAUGH, E. J. "An Unsolved Problem in Spelling," *Elementary English Review*, XIV (January, 1937), 17, 24.

Raises the question: What makes a word difficult to learn? A spelling scale indicates percentages of correct spellings, but "we know . . . . nothing from that fact regarding the difficulty of learning." Perhaps the author would approve an experimental method of determining the difficulty of words similar to that used by Knight and his co-workers in determining the difficulty of primary number combinations.

496. BELLEAU, WILFRID E. "A Two-Year Experiment in Spelling," *Catholic School Journal*, XXXVI (October, 1936), 280.

Describes a program which was designed to overcome spelling deficiencies in Grades VII, VIII, and IX and which consisted of regular instruction as organized in a nationally known spelling book. The average percentage of spelling error is reported to have been reduced from 20 to 6.

497. BHATIA, H. R. *Suggestions for the Teaching of English Spelling in India.* Teaching in India Series, VII. Bombay: Oxford University Press, 1936. Pp. 90.

"This is essentially a handbook for teachers," dealing with the psychology and the teaching of spelling. Aside from those of Rice and Cornman, it shows limited acquaintance with the contributions of American investigators and makes no use of the results of objective studies of the writing vocabulary.

498. BREED, FREDERICK S. "Generalization in Spelling," *Elementary School Journal*, XXXVII (June, 1937), 733–41.

An attempt, in the light of the experiments to date, to indicate the value of generalization in spelling. Concludes that the principle will probably be given somewhat greater recognition in the near future. A bibliography of thirty-nine references is provided.

499. FORAN, T. G. "Basic Psychology and Techniques in Spelling," *Education*, LVII (February, 1937), 364–66.

A brief statement of fundamental principles of instruction in spelling.

500. GARRISON, KARL C. "The High School Spelling Vocabulary," *High School Journal*, XIX (May, 1936), 147–50, 172.

Presents a list of 155 words called the "North Carolina High School Spelling Demons." More detailed information should be given in regard to the method used in the selection of the list.

501. GATES, ARTHUR I. *A List of Spelling Difficulties in 3876 Words.* New York: Teachers College, Columbia University, 1937. Pp. 166.

Shows the average gradation of each of 3,876 words of highest frequency in twenty-five spelling textbooks and courses of study, the percentage of comprehension of the words at different grade levels, and the part or parts of special difficulty, if any, in each word.

502. GATES, ARTHUR I. "Recent Experimental Attacks upon Certain Spelling Problems," *Elementary English Review*, XIV (January, 1937), 6–10.

In the light of recent findings, the author discusses the gradation of words, the principle of generalization, word-list versus word-study programs, the possibility of reducing the amount of formal instruction, and points of special difficulty in words.

503. GILLINGHAM, ANNA, and STILLMAN, BESSIE W. *Remedial Work for Reading, Spelling and Penmanship*. New York: Sackett & Wilhelms Lithographing Co., 1936 (revised). Pp. 170.

Discusses certain fundamental types of disability in phonetic spelling, cites illustrative cases, and indicates major weaknesses to be looked for. In cases of difficulty in nonphonetic spelling, the remedial procedures recommended have much in common with the study procedures employed in the best curriculums except that they give more emphasis to generalization, including the use of rules.

504. HIGLEY, BERNARD R., and HIGLEY, BERNICE M. "An Effective Method of Learning To Spell," *Educational Research Bulletin*, XV (December 16, 1936), 235–42.

An experimental study of learning to spell "by visual perception." In principle, the method avoids analysis, relies on learning by wholes, and is allied with the idea that spelling can be mastered incidentally in reading. Letter marks and examination scores are reported as favoring the method in two experimental classes. Both the value of visual perception and the value of analysis have been demonstrated in previous experiments. The important question is: Should the first be employed to the exclusion of the second?

505. HORN, ERNEST. "The Incidental Teaching of Spelling," *Elementary English Review*, XIV (January, 1937), 3–5, 21.

Contends that, if spelling is taught incidentally in connection with English composition, the course "should be planned, first, to deal with those situations in which children most frequently need to write and, second, to insure growth through these situations . . . . to the point where children can write efficiently in the common and important situations that demand writing in adult life."

506. LOGAN, CONRAD T. "Standards of Pronunciation and Spelling about the Time of the American Revolution," *Virginia Teacher*, XVII (November, 1936), 176–79.

Provides some interesting items on American departures from British orthography that are attributable to Noah Webster.

507. LOGAN, CONRAD T. "Noah Webster's Influence on American Spelling," *Elementary English Review*, XIV (January, 1937), 18–21.

Describes Noah Webster's intense interest in spelling reform and indicates American departures from British orthography for which he was largely responsible through his *American Dictionary of the English Language* (1828).

508. MORRIS, J. ALLEN. "An Individualized Flexible Speller," *Industrial Arts and Vocational Education*, XXVI (February, 1937), 44–49.

An attempt to solve the problem of spelling deficiency in a vocational school, which has much in common with numerous attempts to solve a similar problem in secondary schools. A list of eighteen hundred words was "gathered by putting each boy's mistakes on a separate sheet." One wonders why writing vocabularies more accurately representative of common needs were not consulted in the selection.

509. MURRAY, GILBERT. "The Spelling of English," *Living Age*, CCCLII (April, 1937), 110–12.

That English spelling is due for a "spring cleaning" is the opinion of the author, president of the Simplified Spelling Society. Language changes, but the symbols claim a perpetual lease of life. This fact is unfortunate when the orthography that sets the style is as ingenious as that of King John, who performed the feat of spelling the word "usage" without a single letter employed today: "yowzitch."

510. STAATS, PAULINE G. "Solving a Problem—An Experiment in Making a Word Book," *Childhood Education*, XIII (February, 1937), 274–76.

A "progressive" teacher meets the need for dictionaries during the creative-writing period in Grade III by selecting a vocabulary from word lists for Grades I–VI and making a word book that works.

511. STEADMAN, J. M., JR. "Linguistic Cowardice and Verbal Timidities," *English Journal* (College Edition), XXV (September, 1936), 573–88.

"This article presents some of the results obtained by an experiment conducted over a period of about ten years and throws light upon three types of verbal taboos." Words that are avoided because of uncertainty regarding spelling, meaning, or pronunciation are presented in separate lists; some of the causes of avoidance are indicated; and suggestions for the removal of the taboos are offered.

512. WOODY, CLIFFORD. "Five Questions about Spelling," *University of Michigan School of Education Bulletin*, VIII (April, 1937), 99–101.

Answers "several of the questions most frequently asked with regard to the teaching of spelling." The questions relate to formal spelling in Grade I, the proper source of words, the value of syllabication, and the use of phonics.

HANDWRITING[1]

FRANK N. FREEMAN

513. BEATTY, WILLARD W. "Manuscript Writing: An Effective Tool for Adult Life," *Nation's Schools*, XVIII (September, 1936), 30–32.

[1] Item 503 (Gillingham and Stillman) in this list is also pertinent for handwriting. It gives types of cases emphasizing lack of lateral dominance and development of kinesthetic control. See also Item 403 (Washburne and Morphett) in the list of selected references appearing in the September, 1937, number of the *Elementary School Journal*.

Describes experience in Bronxville schools to support the view that manuscript writing is superior for adults as well as for children.

514. BORAAS, HAROLD O. "An Experimental Study of the Relative Merits of Certain Written Letter Forms with Respect to Legibility, with Speed and Stability as Related Factors," *Journal of Experimental Education*, V (September, 1936), 65–70.

An experimental comparison of variants of certain letter forms.

515. COLE, LUELLA. "A Successful Experiment in the Teaching of Handwriting by Analytic Methods," *Journal of Psychology*, I (1935–36), 209–22.

Reports the gain from diagnosis of faults of particular letters and practice on the same letters.

516. DROHAN, G. "Extent of the Use of Manuscript Writing or Print-Script," *Elementary English Review*, XIII (December, 1936), 287–90.

The report of the returns of a questionnaire with a good bibliography.

517. HILDRETH, GERTRUDE. "Copying Manuscript and Cursive Writing," *Childhood Education*, XIII (November, 1936), 127–28, 142.

Found that a kindergarten class copied manuscript writing much more readily than cursive writing.

518. HOUSTON, HARRY. "Planning Handwriting Instruction," *Childhood Education*, XIII (November, 1936), 123–26, 137.

A sketch of methods in beginning handwriting by the supervisor of writing at New Haven, Connecticut.

519. ROMAN, K. G. "Studies on the Variability of Handwriting, the Development of Writing Speed and Point Pressure in School Children," *Pedagogical Seminary and Journal of Genetic Psychology*, XLIX (September, 1936), 139–60.

Gives the distribution and averages for ages eleven to eighteen and discusses special cases, such as stutterers and those with retarded puberty.

520. SCHEIDEMANN, NORMA V. "Inverse Writing: A Case of Consistent Mirror Writing," *Pedagogical Seminary and Journal of Genetic Psychology*, XLVIII (June, 1936), 489–94.

The treatment of a case of a right-handed child who reversed copy presented on a horizontal plane and inverted copy presented on a vertical plane.

521. STONE, ALA M., and SMALLEY, ETHEL IRWIN. "After Manuscript, What Next?" *Progressive Education*, XIV (February, 1937), 91–94.

Discusses the introduction of joinings into manuscript writing.

522. TOMPKINS, HARRIET D. "How Manuscript Writing Helped Tom," *Childhood Education*, XIII (November, 1936), 129–31.

Effect of manuscript writing on a post-encephalytic boy.

THE SOCIAL SCIENCES[1]

R. M. TRYON

In the compilation of the material for this division of the list of selected references, the assumption has been that the material which has appeared during the past year in *Social Studies* and *Social Education* is well enough known to justify omitting it. Furthermore, to have included it would have necessitated omitting much fugitive material that requires considerable time to locate.

523. BAGLEY, WILLIAM C., and ALEXANDER, THOMAS. *The Teacher of the Social Studies.* Report of the Commission on the Social Studies of the American Historical Association, Part XIV. New York: Charles Scribner's Sons, 1937. Pp. xiv+330.

A volume devoted primarily to the professional aspects of the selection and the education of teachers of the social sciences in the United States and in Europe. An appendix of forty-seven pages contains material on personal qualities essential in a superior teacher of the social sciences.

524. BISCOE, WILLIAM. "The Real Task of the Social Studies: An Experience," *Progressive Education*, XIII (December, 1936), 613–16.

Cites an actual experience to show the real task of the social sciences—that of giving the child "constant practice" in relating the past to his own problems.

525. BROWN, WILLIAM B. "Method and the New Social Studies Curriculum," *Educational Method*, XVI (December, 1936), 109–12.

A discussion of three general principles to follow in seeking a more effective classroom teaching of the social sciences.

526. CULP, V. H. "Activities in the Social Studies for Middle and Upper Grades," *Instructor*, XLVI (February, 1937), 25, 70.

In praise of an activity program in the teaching of social-science materials. Lists forty suggestive activities.

527. EMERY, JAMES NEWELL. "Do You Hate History?" *Journal of Education*, CXIX (November 2, 1936), 476–78.

Offers remedies for making history more interesting and worth while to both teacher and pupil.

528. FLORIDA ELEMENTARY SCHOOLS. "Social Studies in Grade Three," *American Childhood*, XXII (November, 1936), 16–17, 51–52.

A suggested program of work for Grade III. Outlines activities involving social-science materials.

[1] See also Items 201 (Reed) and 204 in the list of selected references appearing in the April, 1937, number of the *Elementary School Journal*, Item 418 (Kelty) in the September, 1937, number, and Item 482 (Gillett) in this list.

529. FLORIDA STATE CURRICULUM REVISION. "Social Studies and the Young Child," *American Childhood*, XXII (September, 1936), 12–13, 47.

Suggested activities for use in Grade I. Explains how to lay the basis for important understandings in the social-science field.

530. GONZAGA, SISTER LEO. "Reading for the Social Studies," *Catholic School Journal*, XXXVII (April, 1937), 115.

Emphasizes the importance of intelligent reading for success in the social sciences and the necessity for the teacher to initiate pupils into the new vocabulary of that field.

531. GREENLEAF, DOROTHY. "Personality Development through the Social Studies," *Childhood Education*, XIII (October, 1936), 67–70.

A stimulating discussion of criteria for selecting the content of the social sciences in the primary grades.

532. HARPER, C. A. "Skills as Outcomes of Teaching the Social Studies," *School and Society*, XLV (January 2, 1937), 20–22.

Lists and discusses eleven important skills to be gained through the teaching of the social sciences.

533. HARPER, C. A. "Paradoxes in Social-Studies Instruction," *Elementary School Journal*, XXXVII (April, 1937), 601–7.

Lists and briefly discusses ten so-called "paradoxes" which the author has noted while visiting teachers engaged in teaching the social sciences.

534. HORN, ERNEST. *Methods of Instruction in the Social Studies*. Report of the Commission on the Social Studies of the American Historical Association, Part XV. New York: Charles Scribner's Sons, 1937. Pp. xx+524.

Contains twelve chapters on various aspects of methods of instruction in the social sciences. Oral instruction, visual aids, the textbook and collateral reading, and reading in relation to learning in the social sciences are treated with considerable fulness.

535. RICHARDS, RUBY C. "Social Science Review Project," *Grade Teacher*, LIV (November, 1936), 41, 81.

An account of the units of work covered by two social-science classes during the school year.

536. ROSS, EARLE D. "History Teaches—How, What?" *Midland Schools*, LI (March, 1937), 222–23.

Discusses the abuses to history. Argues that history teaches "plenty" for those who will learn.

537. SAUNDERS, ELSA S. "Fusion of Art and Social Studies," *Instructor*, XLVI (April, 1937), 20, 65.

Points out the benefits to be derived through a correlation of art and the so-called "social studies."

538. SCHMIDT, LOUIS BERNARD. "The Meaning and Function of History," *Midland Schools*, LI (March, 1937), 234–35.

Discusses the guiding principles to be possessed by pupils and teachers of history for the proper functioning of the subject in education for citizenship.

539. WESLEY, EDGAR BRUCE. *Teaching the Social Studies*. New York: D. C. Heath & Co., 1937. Pp. xviii+636.

Purports to be a new synthesis of contemporary knowledge concerning the teaching of the social sciences in elementary and high schools. Much emphasis on curriculum, method, and measurement.

GEOGRAPHY[1]

EDITH P. PARKER

The following list was derived from a canvass of material published since August 1, 1936. It includes those publications which seem to be the more helpful, significant contributions. Some articles were excluded because of their brevity and because of the fact that they duplicated, in essence, longer treatments included.

540. AITKEN, W. E. M. "Geography for Grades V–VIII," *School* (Elementary Edition), XXIV (September, 1935–June, 1936), 33–38, 122–26, 209–13, 303–6, 397–401, 490–94, 582–86, 672–76, 766–70, 856–58; XXV (September, 1936–June, 1937), 25–29, 128–32, 213–16, 306–9, 400–404, 494–98, 579–83, 675–81, 772–76, 859–62.

Makes specific suggestions for work in geography month by month.

541. EISEN, EDNA E. "Making the Teaching of Geography Effective," *Journal of Geography*, XXXVI (April, 1937), 132–39.

Cites the importance for effective teaching of concreteness, of the interpretation of real situations, and of experiences which develop tool-using abilities. Includes an illustrative unit on rubber.

542. HAHN, H. H. "Why Failures in the Study of Geography?" *Journal of Geography*, XXXV (September, 1936), 225–34.

Discusses nine common causes of such failure.

543. HARTSHORNE, RICHARD. "Geography for What?" *Social Education*, I (March, 1937), 166–72.

Evaluates curriculum trends in geography.

544. HOOPER, A. G. "Illustrative Material for Geography Classes," *School* (Elementary Edition), XXV (September, 1936), 57–60.

Lists available illustrative materials.

[1] See also Item 119 (Sorenson) in the list of selected references appearing in the February, 1937, number of the *School Review*.

545. KIERAN, SISTER MARY. "Vitalized Teaching of Geography," *Catholic School Journal*, XXXVI (November, 1936), 289–95.

Summarizes purposes, methods, and various phases of the subject matter of geography. Includes bibliography.

546. NATIONAL COUNCIL OF GEOGRAPHY TEACHERS. "Geography in the Elementary and Secondary Curricula," *Journal of Geography*, XXXVI (April, 1937), 154–58.

States the contributions of geography to an understanding and solution of many human-welfare problems.

547. PARKER, EDITH P. "Geography in the Elementary and the Junior High School," *International Understanding through the Public-School Curriculum*, pp. 127–34. Thirty-sixth Yearbook of the National Society for the Study of Education, Part II. Bloomington, Illinois: Public School Publishing Co., 1937.

Stresses the significance of sound geographic training in contributing to international understanding.

548. STADTLANDER, ELIZABETH. "An Experiment in Individual versus Group Study of Pictures in Geography," *Journal of Geography*, XXXV (December, 1936), 360–64.

Gives an analytical account of an experiment conducted in a fifth-grade geography class.

549. STULL, DE FOREST. "Geography in the Social Studies Program," *Elements of the Social Studies Program*, pp. 68–86. Sixth Yearbook of the National Council for the Social Studies. Philadelphia: McKinley Publishing Co., 1936.

Discusses the relations of geography to other fields, objectives of work in geography, and a course of study.

550. UTTLEY, MARGUERITE. "Guide Sheets in Geography," *Midland Schools*, LI (February, 1937), 204–6.

Emphasizes the value of guide sheets in directing individual study in geography. Includes illustrative guide sheets.

551. WHITTLESEY, DERWENT. "Geography," *International Understanding through the Public-School Curriculum*, pp. 119–25. Thirty-sixth Yearbook of the National Society for the Study of Education, Part II. Bloomington, Illinois: Public School Publishing Co., 1937.

Shows, with numerous concrete illustrations, the bearing of geographic knowledge on one's attitudes toward, and understanding of, other peoples.

Educational Writings

REVIEWS AND BOOK NOTES

The place of education in state and regional planning.—The appointment of the National Resources Committee in Washington, together with the establishment of state planning boards and regional planning agencies, provides a new channel for co-ordinating action intended to conserve our natural resources and for attacking the problems inherent in the progress of our social institutions. A recent report[1] of the programs and the accomplishments of the planning boards concerns educators, not alone as citizens rightly interested in these vital matters, but as specialists who are ultimately charged with the responsibility for operating an adequate program of education.

Forty-seven states (all except Delaware), four regions, Puerto Rico, and the District of Columbia have planning boards. The scope of state and regional planning as conceived by the planning boards can be observed by the titles of the various subjects which are treated in their reports. The thirty-one subjects reported on by more than one of the state and regional boards and the number of times each topic is mentioned are: water resources, 51; recreation parks and centers, 38; education, 37; land utilization, 33; public health, 31; transportation, 31; publicity programs, 28; co-operation with the Public Works Administration, 28; industrial research, 28; forest resources, 24; studies in governmental structure, 24; city and county zoning, 24; highways, 24; population surveys, 21; mineral resources, 20; soil resources, 19; traffic studies, 19; wild-life resources, 18; public lands, 18; water-power resources, 18; agricultural research, 18; public finance, 18; flood control, 17; land tenure and taxation, 16; prisons and insane asylums, 14; road surveys, 12; mining, 9; manufacturing, 8; irrigation, 7; fishing industry, 5; and rural electrification, 4.

Any reference to education, no matter how slight, has been included in the foregoing analysis. No mention of education is made in the Foreword of the publication. The reports of thirty-four states, the District of Columbia, and two regions (St. Louis and Ohio Valley) mention education. The reports indicate, however, that only eighteen states and the St. Louis Region actively planned for a specific study of one or more phases of education. The phases of education which are receiving some detailed treatment and the number of times

[1] National Resources Committee, *State Planning: Programs and Accomplishments*. Washington: United States Government Printing Office, 1937. Pp. viii+128. $0.25.

each is mentioned are: formulation of educational program, 8; study of the physical plants, 7; financing of schools, 6; school population concentration, 6; general survey of public schools, 5; administration of schools, 5; study of rural schools, 4; survey of secondary schools, 3; consolidation of districts, 3; mapping of school districts, 2; construction of schools, 2; illiteracy, 1; higher education, 1; and curriculum, 1.

The pressing problems of education vary within states and regions. However, there is little in the reports to indicate a comprehensive understanding of, or an attack on, the general problem of education in most of the states and regions. To a great extent this lack is accounted for by the personnel of the boards. Because the occupations of the board members are not stated in all the reports, no satisfactory study can be made of their qualifications for dealing with the problems of education. However, the state superintendent or director of education is a member of the state planning board in only eleven states. In a few states the president or a professor of the state university or of some college within the state is a member of the board. In the main, educational specialists are not included in the membership of the planning boards.

The inclusion of the state school superintendent on the planning board is not uniformly meaningful so far as the consideration which education has received by the boards is concerned. The reports of the eleven states in which the state superintendent of education is a member of the planning board show that six of these states include a definite plan for one or more phases of education. Of the remaining five state reports, three mention education as one of several general studies and the other two make no definite reference to education.

It is not likely that educational specialists will be added to the appointed membership of the planning boards, as desirable and necessary as such additions would seem. The next best move appears to be the drafting of a comprehensive statement of the problems of education to be placed before the existing boards as guiding principles. Such a statement is being prepared by the Educational Policies Commission of the National Education Association and the American Association of School Administrators. When their report is completed, it should prove of interest to all educators. The future reports of the planning boards will disclose to what extent this type of professional guidance is accepted by the planning boards.

ROBERT C. WOELLNER

Practical problems of the teacher.—Despite marked improvement in the means for studying educational problems and despite increased facilities for disseminating professional information, many workers in the field feel that research and training centers provide unjustifiably meager assistance in solving problems regularly encountered in teaching. An impression exists that educational literature is frequently concerned with generalities so remote from actual experience or so difficult of realization as to deal with a different educational world from that in which public-school administrators and teachers serve. While potent forces

are undoubtedly lessening the gap between existing professional knowledge and actual practice, field workers will have to assume an increasing share of the responsibility of seeing that this gap narrows. They should develop techniques for putting educational principles into effect and should publish the results in terms easily comprehended by the average teacher. An effort in this direction is indicated by the publication of a book[1] dealing with aspects of school management essential to successful teaching, which is written by men with extensive administrative experience in public schools.

As a personal and realistic touch, problems of teaching are presented and discussed as informal conversations between a hypothetical dean of education at a state teachers' college and a niece living at his house while preparing for teaching. The conversations cover twenty-three problems, classified under the following "unit" headings: "Training for Teaching," "The Teaching Position," "The School and the Community," "The School Plant," "The School Curriculum and Program," "Health Management," "The Individual Child," "School Accounting," "School Government," and "The Teacher." Each unit is introduced by a short pretest and is followed by a list of "Questions and Projects." A foreword, a brief introduction, and a bibliography of the references used precede the main content of the book.

Advantages of the device of centering discussion in the personalities of the dean and his niece are that it permits the expression of attitudes and reactions not easily introduced in more conventional forms of presentation and that, although the dialogue is stilted at times, it provides a flavor of idealism too rarely encountered in current considerations of educational problems. Evidences are numerous not only that the authors possess mature firsthand acquaintance with problems of teaching in communities of various types but that they have subjected their experiences to critical analysis. They frequently go beneath the surface conventionally covered by educational writers and bring to light aspects fundamentally affecting the solution of serious problems. An example is afforded in the discussion of the problem of training for citizenship. Attention is directed in this passage not only to the influence of personal or gang loyalties harbored by pupils but also to the frequent difficulties of teachers in making distinctions between legitimate and spurious pupil loyalties which gravely affect training for citizenship. Discussions of the necessity for effective records and reports, the responsibilities of the teacher with respect to lunch and recreation periods, and the need for developing community co-operation are especially timely.

Until adequate emphasis is placed on the necessity for conscious and systematic application of basic principles on the part of teachers in the solution of educational problems, teachers will be confused by a great mass of practices to be remembered and teaching will tend to be performed on a job basis rather than on a professional basis. This element is essential to a comprehensive program of

[1] Hugh C. Moeller, O. Stuart Hamer, and Fred C. Bowersox, *Personal Problems in School Management.* New York: Newson & Co., 1936. Pp. 384. $1.60.

teacher training; emphasis on it, in the judgment of the reviewer, would have added measurably to the effectiveness of this book.

This publication presents, in concrete and convincing form, materials on problems of school management vital to both prospective and present teachers. It should find use as a textbook in teachers' colleges and in-service training courses. Administrators also should find it especially helpful in developing desirable teacher attitudes toward extra-instructional responsibilities.

PAUL R. PIERCE

WELLS HIGH SCHOOL
CHICAGO, ILLINOIS

First aids for research workers.—Within the past two decades several books bearing on the various aspects of educational research have appeared. Some have emphasized statistical methods and have devoted little or no discussion to the specific conditions governing the definition of a problem or the interpretation of the data obtained. Some have stressed measurements and the method of constructing measuring instruments, so useful in research work. Others set forth in rather vivid fashion the principles of how to experiment, outlining the proper experimental controls and techniques. Each volume confines itself largely to a single aspect of research. Other recent books, under such titles as *How To Do Research in Education*, *The Art of Educational Research*, *Research and Thesis Writing*, or *The Methodology of Educational Research*, attempt to present in rather abbreviated fashion a unified discussion involving many, if not all, of the techniques employed in research. Naturally the treatment given to the various techniques is unsatisfactory to the experienced research worker.

The volume under review[1] is a most ambitious effort to present the application of all these techniques to the study of educational problems. The authors discuss such topics as "Educational Problems and Their Definition," "Collecting the Data Specified by a Problem—Basic Techniques," "Elementary Techniques for Handling Data," "The Faults of Data and Their Effects," "Studying the Past in Education," "Constructing Measuring Instruments," "Studying Current Conditions or Practices," "Studying the Effect of a Specified Change in a Given Cause," "Studying Problems of Prediction," "Identifying and Studying Cause and Effect Relationships," "Determining What Should Be," "Evaluating and Synthesizing Educational Research," and "Progress toward a Science of Education." Students of educational research will recognize that these titles head chapters giving discussions of such familiar topics as statistical, experimental, historical, and philosophical methods.

However, it should be said that the treatment of Monroe and Engelhart is different from that of other authors in this field. Under each topic discussed experimental studies illustrating the technique under consideration are presented. While the discussion under each topic may be somewhat too brief for

[1] Walter S. Monroe and Max D. Engelhart, *The Scientific Study of Educational Problems*. New York: Macmillan Co., 1936. Pp. xvi+504. $3.00.

those of little experience in research work, reference to the numerous investigations cited will give understanding of the technique at hand. The bibliography at the close of each chapter should prove especially helpful in furthering the comprehension of the technique presented. This volume is rather unique in devoting each of several chapters to the discussion of a general type of research problem. Sample problems for investigation are cited, and the principles of appropriate methods of investigation are discussed. After perusal of the chapters dealing with appropriate methods and with faults prevailing in the current investigations, a student should be able to take proper precautions in his own research activities. He should profit also from the numerous specific suggestions for short cuts and economies facilitating the application of the various techniques. Another contribution of this volume is the discussion of several aspects of statistical methods and concepts, such as the variance ratio, Spearman's *g* factor, or Thurstone's factor analysis usually found in treatments of educational statistics. The emphasis on the concept of "dependability" and on the cause-and-effect relationship seems to the writer to be especially significant.

The book as a whole is really a first aid to research workers. Since the range in difficulty of the materials presented is very great, it is probable that the volume will prove most valuable to the experienced research worker. The common-sense discussions running throughout the various chapters can be understood by the novice in research, but the more involved treatments of statistical formulas may baffle him. He may consider too limited the space devoted to some aspects of research techniques, but he certainly will be made aware, through the reading of this book, of the need for the application of truly scientific techniques in educational investigations. The book presents a real challenge to those interested in the scientific study of education.

CLIFFORD WOODY

UNIVERSITY OF MICHIGAN

Evaluation of a health program.—The research reported by Hardy and Hoefer in *Healthy Growth*[1] is unique in the literature of health education, representing, as it does, a thorough and scientific attempt to measure the effects of a health program. In contrast with its scope and elaborate statistical treatment of the data, the previously published descriptions of health programs appear obviously inadequate in their feeble evaluation based only on subjective opinion or quantitative study of one or two outcomes. Health educators have long recognized the need for experimental work in a natural school stituation but have been deterred, perhaps, by the difficulty and the complexity of the problem.

The Hardy and Hoefer investigation is also allied to the growth studies being made at Harvard University, the University of Iowa, and the University of California, insofar as they all use the techniques of longitudinal research applied to child development.

[1] Martha Crumpton Hardy and Carolyn H. Hoefer, *Healthy Growth: A Study of the Influence of Health Education on Growth and Development of School Children*. Chicago: University of Chicago Press, 1936. Pp. xii+360. $3.50.

The introductory chapter of *Healthy Growth* outlines the general plan of the investigation. It is presented as a longitudinal, control-group experiment beginning in Grade III and extending over twelve years. More than two hundred pages of quantitative and qualitative data were collected for each of the 409 children studied.

In the next eight chapters description and discussion of methodology occupy a prominent place. Then follows a statistical comparison of the three groups: the experimental group, which followed a complete health program; a group that did not receive health instruction; and a group that had limited contact with all phases of the program. These groups are compared with respect to a large number of physical and psychological items. This treatment of the total number of cases in each group is followed by further pairing of cases and statistical treatment of the data.

Among the multiplicity of specific results reported, the improved physical condition of the children in the experimental group stands out most unequivocally. The pupils who had participated in the entire health program were superior to the control pupils in general physical condition, nutritional rating, firmness of muscle, posture, muscular strength and vigor, and number of defects corrected. This superiority of the experimental group, however, cannot be attributed to the classroom health instruction alone. It is a resultant, as well, of the other features of the program and, to some extent, of the special characteristics of the groups.

In the last three chapters the authors summarize, interpret, and present new relationships among the data collected over the period of twelve years.

Even though conclusive evidence of the effectiveness of the health instruction was not secured, this research has made an invaluable contribution by developing more precise methods of measurement than have before been used, by analyzing the process of appraisal of children's health, and by frankly calling attention to sources of error in the experimental technique. It has emphasized the importance of setting up, in the beginning if possible, groups which are comparable with respect to the factors that are most likely to influence the physical development and educability of the pupils.

The fullest possibilities of the original data are still unexhausted. If the wealth of data collected were reassembled as case studies, individual growth curves could be plotted and individual patterns of health behavior and status could be studied with reference to the associated environmental conditions.

RUTH STRANG

TEACHERS COLLEGE, COLUMBIA UNIVERSITY

New answers to old questions.—For many years authors have been writing material in the field of sex education which parents might use when the children asked questions about sex. This book[1] is the first to present for the children

[1] Frances Bruce Strain, *Being Born*. New York: D. Appleton-Century Co., Inc., 1936. Pp. 144. $1.50.

themselves the answers to the questions which they usually ask with regard to birth, physical development, marriage, and mating.

The author states that children are interested in the origin of life, in themselves as human beings, not in sex. The book, written from this point of view, is intended primarily to be given to children as one would give them any other book about material in which they have a deep interest.

The first chapter deals with the original cells as seen under the microscope and then takes up point by point where the cells are made, the physiological development necessary for producing them, and the details of the reproductive structure. All this material is presented in a scientific, matter-of-fact fashion.

The material on the growth of the embryo should be particularly interesting both to children and to their parents, as should the comparison of growing embryos in animals and in man. The pictures throughout the book are unusually interesting, especially those of the human embryo from the fifth week through the sixteenth.

It is obvious that the author has had long and understanding association with children of all ages. Not only are the questions presented in the way in which children themselves would ask them, but the answers are simple, clear, and easily remembered.

There is nothing in this book to stir up unpleasant emotional associations or to cause strain in the average child. Since the problem of each child is an individual one, however, it would probably not be wise to recommend a wholesale distribution of this work to all children at all levels of development.

The only criticism of the book which might be made is that little is done to check on the child's use of the information given. The reviewer doubts that it would be wise to give this book to children without consulting the physician. It should certainly not be given without some sort of follow-up in the way of discussion by parents or by others concerned with the child's education in the field of sex.

Being Born is such an important contribution to the literature on this subject that it should be read by parents, teachers, ministers, social workers, and all others interested in the education and training of children from seven to twelve years of age.

ADA HART ARLITT

UNIVERSITY OF CINCINNATI

Guiding the very young child's reading.—Many years ago Kate Douglas Wiggin championed the young child in *Children's Rights* (Boston: Houghton Mifflin Co., 1892), a convincing book on the need of providing desirable attitudes and motivations early in life. The book under review[1] discusses a young child's right to the heritage that an intelligent home can give in fostering the beginnings of literary appreciation. Fortunate indeed are those children who can be given

[1] Clarence Wesley Sumner, *The Birthright of Babyhood*. New York: Thomas Nelson & Sons, 1936. Pp. x+86. $1.00.

such an advantage! This book is a step in extending such privileges more widely.

The author, the originator of a widely known plan for extending public-library service to hospitals, undertook a study to bring library service to parents of young children, which culminated in the Mother's Room of the Youngstown (Ohio) Public Library. This slight volume embodies the principles used in carrying out that plan, exemplified in the actual education of the author's young son. It is intended for mothers everywhere and for some practical aid to teachers in the nursery school, kindergarten, and elementary school. It is an attempt to outline the best and the surest methods of instilling in the child a lasting love for books and reading.

A little more than half the book discusses the theory, under the chapter headings: "Every Mother's Opportunity," "Why the Love of Books and Reading," "The Method," "The Mother's Room," and "The Child and His Library." Appropriate quotations precede the discussions. The method outlined is that of providing the child at the right moment emotionally with the degree of satisfaction in rhythm, word, and sound which will lead to enjoyment in literature. The psychology is up to date and has a bearing on the reading-readiness problem.

This account of how, from babyhood through the age of five, continuous advantage is taken of opportunities for developing appreciation is followed by two chapters giving "Reading Menus: Part I, The First Two Years; Part II, From Two to Five Years" and "Sources of Recommended Material."

These excellent and up-to-date bibliographies list and give some choice illustrations of lullabies, finger plays and action rhymes, picture-books, Mother Goose and nursery rhymes, poems, fables and fairy tales, and stories. The further material recommended is classified and gives the name of the publisher and the price. If the date of publication had been given, the list would have been even more useful. It also has brief annotations, which are especially valuable because they are based on the author's successful experience with the material, supplemented by the experience of many mothers and librarians.

Although the title is slightly misleading, because only one birthright is discussed, the book is a contribution to the literature of parent education and of the preschool period of the child. It is compact and attractive in format. There is only one illustration. A short introduction by Garry C. Myers, giving the genesis of the book, and a brief foreword by the author are included.

SOPHIA C. CAMENISCH

CHICAGO NORMAL COLLEGE

CURRENT PUBLICATIONS RECEIVED

GENERAL EDUCATIONAL METHOD, HISTORY, THEORY AND PRACTICE

AKRIDGE, GARTH H. *Pupil Progress Policies and Practices*. Teachers College Contributions to Education, No. 691. New York: Teachers College, Columbia University, 1937. Pp. viii+76. $1.60.

ARSENIAN, SETH. *Bilingualism and Mental Development: A Study of the Intelligence and the Social Background of Bilingual Children in New York City.* Teachers College Contributions to Education, No. 712. New York: Teachers College, Columbia University, 1937. Pp. vi+164. $2.10.

BASON, CECILIA HATRICK. *Study of the Homeland and Civilization in the Elementary Schools of Germany: With Special Reference to the Education of Teachers.* Teachers College Contributions to Education, No. 710. New York: Teachers College, Columbia University, 1937. Pp. iv+166. $1.85.

BOWDEN, A. O., and MELBO, IRVING R. *Social Psychology of Education: Applications of Social Psychology to Educational Problems.* New York: McGraw-Hill Book Co., Inc., 1937. Pp. xvi+296. $2.50.

BRINK, WILLIAM G. *Directing Study Activities in Secondary Schools.* Garden City, New York: Doubleday, Doran & Co., Inc., 1937. Pp. xiv+738. $3.00.

BROOKS, FOWLER D., with the collaboration of LAURANCE F. SHAFFER. *Child Psychology.* Boston: Houghton Mifflin Co., 1937. Pp. xxx+600. $3.00.

BRYAN, ROY C. *Pupil Rating of Secondary School Teachers.* Teachers College Contributions to Education, No. 708. New York: Teachers College, Columbia University, 1937. Pp. vi+96. $1.60.

CHAVE, ERNEST J. *Personality Development in Children.* Chicago: University of Chicago Press, 1937. Pp. xiv+354. $2.50.

CUFF, NOEL B. *Child Psychology.* Louisville, Kentucky: Standard Printing Co., 1937. Pp. 300.

DI NAPOLI, PETER J. *Homework: In the New York City Elementary Schools.* Teachers College Contributions to Education, No. 719. New York: Teachers College, Columbia University, 1937. Pp. 60. $1.60.

Educational Broadcasting, 1936: Proceedings of the First National Conference on Educational Broadcasting, Held in Washington, D.C., on December 10, 11, and 12, 1936. Edited by C. S. Marsh. Chicago: University of Chicago Press, 1937. Pp. xx+462. $3.00.

GABEL, RICHARD J. *Public Funds for Church and Private Schools.* Washington: Catholic University of America, 1937. Pp. xiv+858.

GEMMILL, ANNA M. *An Experimental Study at New York State Teachers College at Buffalo to Determine a Science Program for the Education of Elementary Classroom Teachers.* Teachers College Contributions to Education, No. 715. New York: Teachers College, Columbia University, 1937. Pp. viii+74. $1.60.

GRINNELL, J. ERLE. *Interpreting the Public Schools: A Manual of Principles and Practices of Public School Interpretation with Special Emphasis on Published Materials.* New York: McGraw-Hill Book Co., Inc., 1937. Pp. xii+360. $2.75.

GRIZZELL, E. D. *American Secondary Education.* New York: Thomas Nelson & Sons, 1937. Pp. xiv+312. $2.00.

HELLMICH, EUGENE W. *The Mathematics in Certain Elementary Social Studies in Secondary Schools and Colleges.* Teachers College Contributions to Educa-

tion, No. 706. New York: Teachers College, Columbia University, 1937. Pp. vi+126. $1.85.

HENDERSON, ELISHA LANE. *The Organization and Administration of Student Teaching in State Teachers Colleges.* Teachers College Contributions to Education, No. 692. New York: Teachers College, Columbia University, 1937. Pp. vi+126. $1.60.

An Introduction to Modern Education. Edited by Charles E. Skinner and R. Emerson Langfitt. Boston: D. C. Heath & Co., 1937. Pp. xvi+492. $2.80.

LAZAR, MAY. *Reading Interests, Activities, and Opportunities of Bright, Average, and Dull Children.* Teachers College Contributions to Education, No. 707. New York: Teachers College, Columbia University, 1937. Pp. 128. $1.60.

MCCULLOUGH, ASHLEY M. *A Critical Analysis of the Fuel Management Program for Schools: Selected New Jersey Cities Compared with Nation-Wide Practice.* Teachers College Contributions to Education, No. 713. New York: Teachers College, Columbia University, 1937. Pp. viii+142. $1.85.

MCEACHERN, EDNA. *A Survey and Evaluation of the Education of School Music Teachers in the United States.* Teachers College Contributions to Education, No. 701. New York: Teachers College, Columbia University, 1937. Pp. viii+184. $1.85.

MCGAUGHY, J. R. *An Evaluation of the Elementary School: With a Forecast of Its Future.* Indianapolis, Indiana: Bobbs-Merrill Co., 1937. Pp. viii+422.

MCKOWN, HARRY C. *Extra-curricular Activities.* New York: Macmillan Co., 1937 (revised). Pp. xvi+734.

MATTHEWS, M. TAYLOR. *Experience-Worlds of Mountain People: Institutional Efficiency in Appalachian Village and Hinterland Communities.* Teachers College Contributions to Education, No. 700. New York: Teachers College, Columbia University, 1937. Pp. xvi+210. $2.25.

REEDER, WARD G. *An Introduction to Public-School Relations.* New York: Macmillan Co., 1937. Pp. xii+260. $2.25.

WESLEY, EDGAR BRUCE. *Teaching the Social Studies: Theory and Practice.* Boston: D. C. Heath & Co., 1937. Pp. xviii+636.

WHEAT, HARRY GROVE. *The Psychology and Teaching of Arithmetic.* Boston: D. C. Heath & Co., 1937. Pp. x+592. $2.80.

BOOKS PRIMARILY FOR ELEMENTARY-SCHOOL TEACHERS AND PUPILS

CURL, GRACE VORIS. *Plutarch's Lives: Shortened and Simplified.* Boston: D. C. Heath & Co., 1937. Pp. viii+376. $0.96.

GABLER, EARL R., and FREDERICK, ROBERT W. *Methods of Teaching in Junior and Senior High School: A Guidebook.* New York: Inor Publishing Co., 1937 (revised). Pp. xviii+212. $1.55.

GATES, ARTHUR I., BAKER, FRANKLIN T., and PEARDON, CELESTE COMEGYS. The Good-Companion Books: *The Story Book of Nick and Dick.* New York: Macmillan Co., 1937. Pp. x+246. $0.80.

KINYON, KATE W., and HOPKINS, L. THOMAS. *Junior Home Problems*, pp. viii+310, $1.12; *Junior Foods*, pp. x+362, $1.16; *Junior Clothing*, pp. viii+264, $1.16. Chicago: Benj. H. Sanborn & Co., 1936 and 1937 (revised).

LYDEN, CLARA. *Children Come and Sing: Seasons and Such.* Milwaukee, Wisconsin: E. M. Hale & Co., 1937. Pp. 24.

MCCLURE, C. H., SCHECK, CHARLES C., and WRIGHT, W. W. *The Story of Ancient Times.* Our Developing Civilization: A Series of Social Studies Textbooks Based on History. Chicago: Laidlaw Bros., 1937. Pp. viii+338. $1.00.

MCGUIRE, EDNA. *A Full-grown Nation.* New York: Macmillan Co., 1937. Pp. viii+454. $1.28.

The Nature Activity Readers: Book IV, *Earth and Sky* by Paul Grey Edwards and James Woodward Sherman, pp. xvi+278, $0.92; Book V, *Forest Families* by Verne O. Graham and James Woodward Sherman, pp. xvi+316, $0.96. Boston: Little, Brown & Co., 1937.

One-Act Plays for Junior High School. Selected and edited by Catharine Bullard. New York: Henry Holt & Co., 1937. Pp. xii+260. $1.20.

Picture Scripts: *On the Road* by Marjory Taylor Hardwick, pp. 48; *Keo the Otter* by Virgie Bernhardt, pp. 48; *The Wooden Bear: A Story of Switzerland* by Edna Potter, pp. 48; *The World Is Round* by Rose Wyler, pp. 48; *Two Little Navahos Dip Their Sheep* by Eva L. Butler, pp. 48. Milwaukee, Wisconsin: E. M. Hale & Co., 1937. $0.15 each.

The Pupil's Guide to the Individualized Aspects of Study of the Materials in: *Kelty's "The Beginnings of the American People and Nation"* pp. 96; *Kelty's "The Growth of the American People and Nation,"* pp. 106. Boston: Ginn & Co., 1937. $0.28 each.

SEIBERT, EARL W. *Who Are You and Where Are You Going?* pp. 32, $0.25; *Individualized Group Guidance;* Leader's Manual for "Who Are You," pp. 40, $0.50. Hershey, Pennsylvania: Earl W. Seibert, 1937.

Teachers' Lesson Unit Series: No. 9 (revised), *Mother Goose Land* (Grade I) by Jessie Blaney, *Our Penny Circus* (Grade I) by Janie Gooch, *The Theatre* (Grade I) by Julie Regnier; No. 20 (revised), *A Grocery Store* (Grade I) by Grace T. Vaughan, *Building a House and Playing in It* (Grade I) by Grace C. Cubbedge, *Our Happy Play House* (Grade I) by Isabelle Clark and Hazel Brooks; No. 27 (revised), *Indians of the Southwest* (Grade IV) by Maurine Grammer, *Mexico* (Grade IV) by Leona Reese Cain; No. 31 (revised), *Round and Round the World* (Grade IV) by Della Van Amburgh, *A Trip to Europe and the British Isles* (Grade V) by Ethel M. Duncan; No. 36 (revised), *China* (Grade III) by Bertha Joseph, *Japan* (Grade III) by Odille Ousley, *Japan* (Grade III) by Sue M. Alexander; No. 39 (revised), *Trees* (Grade IV) by Helen R. Toellner, *Conserving Our Plant Life* (Grades V and VI) by Isabel Martin. New York: Teachers College, Columbia University, 1937. $0.40 each.

WILSON, HOWARD E., WILSON, FLORENCE H., and ERB, BESSIE P. Our Ways

of Living: *Living in Many Lands*, pp. x+306; *Where Our Ways of Living Come From*, pp. xii+474; *Living in the Age of Machines*, pp. xii+586; *Richer Ways of Living*, pp. xii+666. Chicago: American Book Co., 1937.

PUBLICATIONS OF THE UNITED STATES OFFICE OF EDUCATION AND OTHER MATERIAL IN PAMPHLET FORM

A Bibliography on Education in the Depression. Washington: Educational Policies Commission of the National Education Association and the American Association of School Administrators, 1937. Pp. 118. $0.50.

Books on Home and Family Life. Compiled by Ruth Budd. New York: Teachers College, Columbia University, 1937. Pp. viii+24. $0.35.

CAMPBELL, GEORGE W. *The Influence of Court Decisions in Shaping the Policies of School Administration in Kentucky.* Bulletin of the Bureau of School Service, Vol. IX, No. 4. Lexington, Kentucky: University of Kentucky, 1937. Pp. 132. $0.50.

EDUCATIONAL POLICIES COMMISSION. *Research Memorandum on Education in the Depression.* Prepared under the Direction of the Committee on Studies in Social Aspects of the Depression. Bulletin 28. New York: Social Science Research Council (230 Park Avenue), 1937. Pp. xii+174. $1.00.

Farmers without Land. Public Affairs Pamphlet No. 12. New York: Public Affairs Committee (8 West Fortieth Street), 1937. Pp. 32. $0.10.

FLETCHER, ROBERT S., and WILKINS, ERNEST H. *The Beginning of College Education for Women and of Coeducation on the College Level.* Bulletin of Oberlin College, New Series 343. Oberlin, Ohio: Oberlin College, 1937. Pp. 14.

Four Years of Network Broadcasting: A Report by the Committee on Civic Education by Radio of the National Advisory Council on Radio in Education and the American Political Science Association. Chicago: University of Chicago Press, 1937. Pp. vi+78. $0.25.

FRENCH, R. S. *An Introduction to the Problems of Sight Conservation: A Handbook for Teachers and School Executives.* State Department of Education Bulletin No. 3. Sacramento, California: State Department of Education, 1937. Pp. x+76.

The Health Status and Health Education of Negroes in the United States. Journal of Negro Education, Vol. VI, No. 3. The Yearbook Number, VI. Washington: Bureau of Educational Research, Howard University, 1937. Pp. 261–587. $2.00.

HILDRETH, GERTRUDE H., and PINTNER, RUDOLF. *Manual of Directions for Pintner-Paterson Performance Tests, Short Scale.* New York: Teachers College, Columbia University, 1937. Pp. 16. $0.50.

HOLZINGER, KARL J., assisted by FRANCES SWINEFORD and HARRY HARMAN. *Student Manual of Factor Analysis: An Elementary Exposition of the Bi-factor Method and Its Relation to Multiple-Factor Methods.* Chicago: Statistical Laboratory, Department of Education, University of Chicago, 1937. Pp. vi+102. $1.50.

The Junior Red Cross in Convention Assembled: Report of Proceedings of the Eleventh Annual Section of Junior Red Cross Delegates to the National Convention of the American Red Cross, Washington, D.C., May 10–13, 1937. Washington: American Red Cross, 1937. Pp. 64.

KAULFERS, WALTER V., and ROBERTS, HOLLAND D. *A Cultural Basis for the Language Arts: An Approach to a Unified Program in the English and Foreign Language Curriculum.* Issued for Use in the Stanford Language Arts Investigation. Stanford University, California: Walter V. Kaulfers and Holland D. Roberts, 1937. Pp. vi+116. $1.00.

LAHEY, SISTER M. FLORENCE LOUISE. *Retroactive Inhibition as a Function of Age, Intelligence, and the Duration of the Interpolated Activity.* Educational Research Monographs, Vol. X, No. 2. Washington: Catholic Education Press, 1937. Pp. 94.

MAASKE, ROBEN JOHNE. *The Status of the Elementary School Principal in Oregon.* Salem, Oregon: Superintendent of Public Instruction, 1936. Pp. 72.

Mandatory State-adopted Contract Forms. Washington: Committee on Tenure of the National Education Association, 1937. Pp. 32. $0.25.

NEBRASKA STATE TEACHERS' ASSOCIATION. Educational Bulletin, Mimeographed Series II: No. 1, "Current Practices of Nebraska Schools, 1936–37" by Galen Saylor, pp. 26; No. 2, "Inducting New Teachers into Service" by Galen Saylor and Consultant Group, pp. 32. Lincoln, Nebraska: Department of Research, Nebraska State Teachers' Association, 1937.

The 1937 Achievement Testing Program of the Educational Records Bureau: Including a Survey of the First Decade of Its Activities, and a Discussion of the System of Scaled Scores Devised for the Co-operative Tests. Educational Records Bulletin No. 20. New York: Educational Records Bureau (437 West Fifty-ninth Street), 1937. Pp. xii+134.

The Physical Education Curriculum (A National Program). Compiled by Wm. Ralph LaPorte. Publication Sponsored by the College Physical Education Association. Los Angeles, California: Caslon Printing Co. (540 South San Pedro Street), 1937. Pp. 62.

"A Program for Teaching Pupils How To Study." Aberdeen, South Dakota: Simmons Junior High School, 1937. Pp. viii+112 (mimeographed). $1.25.

Recent issues of the Office of Education:

Bibliography No. 62 (1937)—*United States Government Publications on the Work of the Government.* Compiled by Grace S. Wright. Pp. 14.

Bulletin No. 12, 1936—*Public Education in Alaska* by Katherine M. Cook. Pp. 56.

Bulletin No. 2, 1937—*Trends in Secondary Education:* Being Chapter II of Volume I of the *Biennial Survey of Education in the United States: 1934–36* (advance pages) by Carl A. Jessen. Pp. vi+44.

Bulletin No. 4, 1937—*Conservation in the Education Program* by William H. Bristow and Katherine M. Cook. Pp. vi+78.

Pamphlet No. 71 (1937)—*An Annotated Bibliography on the Education and*

Psychology of Exceptional Children. Prepared by Elise H. Martens and Florence E. Reynolds. Pp. iv+42.

Pamphlet No. 73 (1937)—*Subject Registrations in Private High Schools and Academies, 1932–33* by Carl A. Jessen, Lester B. Herlihy, and Blanche K. Choate. Pp. 30.

Pamphlet No. 74 (1937)—*Crucial Issues in Education: An Address Delivered by J. W. Studebaker, Commissioner of Education, before the Department of Superintendence, National Education Association, in Session at New Orleans, Louisiana, February 22, 1937.* Pp. 20.

"Report of Proceedings of the Third Annual Conference of Supervisors and Directors of Instruction in Elementary Schools." Called Under the Auspices of the State Education Department, Albany, New York, May 14–15, 1937. Albany, New York: State Education Department. Pp. 50 (mimeographed).

SCHMIEDELER, EDGAR, and SUBCOMMITTEE ON AGRICULTURE. *Agriculture and International Life.* Pamphlet No. 24. Washington: Catholic Association for International Peace (1312 Massachusetts Avenue, Northwest), 1937. Pp. 64. $0.10.

SMITH, HENRY LESTER; MCELHINNEY, ROBERT STEWART; and STEELE, GEORGE RENWICK. *Character Development through Religious and Moral Education in the Public Schools of the United States.* Bulletin of the School of Education, Indiana University, Vol. XIII, No. 3. Bloomington, Indiana: Bureau of Cooperative Research, School of Education, Indiana University, 1937. Pp. 138. $0.50.

"Suggestions for Unit Planning." Aberdeen, South Dakota: Public Schools (C. J. Dalthorp, Superintendent). Pp. vi+84 (mimeographed). $1.00.

MISCELLANEOUS

Washington: City and Capital. Federal Writers' Project, Works Progress Administration. American Guide Series. Washington: United States Government Printing Office, 1937. Pp. xxvi+1140. $3.00.